DOCUMENT RESUME

ED 416 751 HE 030 944

AUTHOR	Miller, Anthony A., Ed.
TITLE	Defining the Future Characteristics of Physician Assistant Education Proceedings (Alexandria, VA, August 16-17, 1996).
INSTITUTION	Association of Physician Assistant Programs, Alexandria, VA.
SPONS AGENCY	Health Resources and Services Administration (DHHS/PHS), Rockville, MD. Bureau of Health Professions.
PUB DATE	1996-08-00
NOTE	52p.
CONTRACT	103HR951169P000-000
AVAILABLE FROM	Association of Physician Assistant Programs, 950 N. Washington St., Alexandria, VA 22314 (free).
PUB TYPE	Collected Works - Proceedings (021)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	*Allied Health Occupations Education; Employer Employee Relationship; *Futures (of Society); *Health Services; Higher Education; Physicians; *Physicians Assistants; Rural Areas; Supply and Demand

ABSTRACT

This report summarizes a project that focused on the future of the education of physician assistants. The panel of expert presenters represented physician assistant (PA) educators, educators of other health care professionals, employers of PAs, health care oriented foundations, a health care workforce expert, and members of the PA profession. The conference outcome indicated the need for continued examination of the external factors that influence the education and practice of PAs, as well as the development of strategies to respond to the rapidly changing health care environment. Papers include: "From Lexicon to Praxis: Future Characteristics of Physician Assistant Education" (Eugene Jones); "A Glimpse of the Future" (Albert Simon); "Educator's View" (Brenda Jasper); "Health Professions: Projections of Supply and Demand" (James Cawley); "Rural Practice Focus" (Jennifer Krueger); "Health Professions Foundation View" (Jennifer Ruzek); "Education for a Changing Health Care System" (Christopher Bork); "PA Employer View" (Brian Trojniak); "Physician's View" (Norman Kahn); and "PA Employer View" (Kenneth Moritsugu). Lists of the advisory committee members and panelists are appended. (WD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 416 751

Defining the Future Characteristics of Physician Assistant Education

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Association of Physician Assistant Programs

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Association of Physician Assistant Programs

BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

HE030 944

Proceedings

Defining the Future Characteristics of Physician Assistant Education

August 16 & 17, 1996

Association of Physician Assistant Programs
Alexandria, Virginia

EDITED BY ANTHONY A. MILLER

This project was funded in part through a contract with the U.S. Department of Health & Human Services, Health Resources & Services Administration, Bureau of Health Professions, Division of Medicine, Contract # 103HR951169P000-000.

Table of Contents

	Foreword	i
	Introduction	ii
1	From Lexicon to Praxis: Future Characteristics of Physician Assistant Education Eugene Jones, Ph.D., PA-C	1
2	A Glimpse of the Future Albert Simon, M.Ed., PA-C	5
3	Educator's View Brenda Jasper, M.Ed., PA-C	10
4	Health Professions: Projections of Supply & Demand James Cawley, PA-C, MPH	13
5	Rural Practice Focus Jennifer Krueger, PA-C	17
6	Health Professions Foundation View Jennifer Ruzek	18
7	Education for a Changing Health Care System Christopher Bork, Ph.D.	22
8	PA Employer View Brian Trojniak, PA-C	26
9	Physicians' View Norman Kahn, MD	30
10	PA Employer View Kenneth Moritsugu, MD	35
	Appendix A: Advisory Committee	42
	Appendix B: Panelists	43

NOTE: The opinions expressed in this publication represent those of the panelists and do not necessarily represent the opinions of the Association of the Physician Assistant Programs, its members, Board of Directors, or any branch of the Federal Government.

Foreword

This report summarizes a project that focused on the future of the education of physician assistants. Was this an overly ambitious goal for such a small project? Perhaps, but the goal was not to describe or define the future, an impossible task. Rather the purpose of the project was to reestablish discussion about the future of PA education by reorienting PA educators to include a futuristic perspective in their planning efforts.

In writing the proposal for this project, I began with several assumptions. First, the previous few years had seen the advent and further development of very significant changes in healthcare - the rise of managed care, the attempts of state and federal governments to revise the a health care system, ballooning costs in health care delivery, the need to respond to nationwide epidemics such as HIV/AIDS, an expansion of technology, the creation or expansion of significant gaps in access and availability of healthcare, to mention a few.

Second, leadership within the PA profession, the healthcare industry, and governmental agencies had, understandably, become almost wholly reactive in their approaches. PA education, likewise, was reactionary in responding to these sweeping changes. Unprecedented growth in the size and number of programs to educate PAs along with struggles to maintain the quality education consume the energies of leaders in PA education. However, growth was primarily duplicating existing, successful approaches to education rather than creating innovative methods to educate PAs to meet new and future challenges.

Third, the pace of change in healthcare was increasing rather than stabilizing. Fourth, the PA profession in general and PA education in particular were becoming too isolationist in approach. The profession could benefit from listening to the input and vision of people outside the PA profession: consumers, employers, healthcare workforce planners, private change agents, and providers from other healthcare professions.

I reasoned that if PA education is a vehicle dedicated to be appropriate preparation of PAs to serve society, it must not only be keenly aware of the roadway it is on, but must also fix its gaze further down the road to the horizon it is approaching. It must lead by choosing appropriate pathways. Leadership requires a vision of the future, a direction in which to lead, and an awareness that the future is not a stable state which can be defined, but an unstable state, ever in need of further clarification.

So, the purpose of the project was to begin to redirect educational leaders to seek a vision to support future directions for PA education.

As always limited resources defined the scope and methodology. So, a small group process was selected to be followed by wider dissemination. This report is part of the dissemination of information.

To answer my original question, I think the goal was achievable. The discussion has now begun. The project included input from outside the PA profession as well as from within. It has stimulated further discussions. Funding has already been sought and awarded for a much larger project which will further develop a vision, future directions and strategic planning for PA education for the immediate years ahead.

The future is always before us. Beckoning. Challenging. This project has helped to re-engage us with our future.

James Hammond, MA, PA-C

Introduction

Executive Summary

On August 16 & 17, 1996 a panel of experts and leaders in the PA profession were convened in Alexandria, VA to examine the future characteristics of PA education. The panel of experts represented PA educators, educators of other health care professionals, employers of PAs, health care oriented foundations, a health care workforce expert and the PA profession. On day one of the conference, panelists presented their perspectives on the future of PA education and interacted with leaders in the PA profession. On day two, focus groups consisting of the expert panel and PA profession leaders were conducted. Outcomes from this conference indicate the need for continued examination of external factors influencing the education and practice of PAs as well as the development of strategies to respond to the rapidly changing health care environment.

Overview and Purpose

It is clear that the health care system is in the midst of dramatic changes. Many of these changes are intrinsic to the health care system itself such as the proliferation of managed care and refocus on primary care. Other influences are external to the health care system but have significant impact. These influences include telecommunications and other technologies.

In the midst of these rapidly occurring changes, there has been a dramatic increase in the number of educational programs to prepare the physician assistant. Over 30 programs have developed in the past three years. In addition, the number of students in PA programs has more than doubled since the late 1980s. It appears that much of the focus of the PA profession over the past decade has been devoted to managing growth versus managing the future. The last time the Association of Physician Assistant Programs (APAP) formally looked to the future was nearly a decade ago when the Ad Hoc Futures Committee was commissioned by then President, Jack Liskin. A formal report titled Physician Assistants for the Future: An in-depth study of PA education and practice in the year 2000 by the Association of Physician Assistant Programs was released in 1989.

In September, 1995, the Association was awarded a purchase order to support a national conference on physician assistant education for the year 2000. The purpose of the contract was to convene a meeting of experts from within and outside the PA profession to focus on PA education between now and 2010 with respect to the following:

- Identify specific elements of the knowledge base, skills and professional practice values that will likely characterize PAs entering the workforce in the next five to fifteen years which are different from those of today's graduates;
- Identify how the role of the PA will interact with the roles of other health professions in the health care system of the future;
- Develop recommendations for new models or methodologies to meet these educational needs;
- Identify likely barriers to achieving more responsive educational models and methodologies;
- Propose strategies for educational institutions to overcome the obstacles and meet the challenges;
- Convey these findings, recommendations and strategies to all PA programs and other interested parties to encourage the development of curricular models which are responsive to the changing health care environment.

Methodology

The purchase order awarded to the Association required the completion of eleven (11) tasks to satisfy the contract. The project leader initially appointed by the Association met with the project officer, identified an advisory committee and conducted an initial meeting with the advisory committee in October, 1995. The advisory committee represents a cross-section of individuals representing PA faculty and recognized leadership in the PA profession. A roster appears in Appendix A. Due to unforeseen circumstances, the original project leader resigned and Mr. Anthony Miller was appointed in January, 1996.

Staff were identified to support the project's activities. Ms. Vicki Hutlock of Education and Allied Health Consulting, North Olmsted, Ohio was selected as the project coordinator. Ms. Barbara Jenkins of Jenkins Research Associates, Cleveland, Ohio was selected as meeting/focus group facilitator. Additional staff support was provided through the Association of Physician Assistant Programs national office.

A follow-up advisory committee meeting was conducted via conference call on May 17, 1996 and through a series of e-mail communications. The committee established the format for the national conference and nominated potential panelists based upon the criteria established in the purchase order. In addition, the site of Alexandria, Virginia was selected due to its accessibility for panelists and national leaders in the PA profession. The conference title was confirmed as "Defining Future Characteristics of Physician Assistant Education" and the dates of August 16-17, 1996 were established.

Between May and July, 1996, the project leader and coordinator confirmed panelists and arrangements for the conference. The format established was panel presentations on day one and focus groups on day two. There were two focus groups. One group consisted of the panelists and the second group was made up of leaders in the PA profession who were observers on day one. The conference was held at the Sheraton Suites hotel in Alexandria, VA on August 16 & 17, 1996. A detailed report of the focus groups was prepared by Ms. Jenkins and was presented to the APAP board of Directors.

Transcripts of the panel presentations were prepared and sent to panel members for editing. In addition, the conference proceedings were summarized in two articles which appeared in the September 30 and October 30 issues of the AAPA News.

A summary of the conference was prepared and presented by Mr. Miller, Ms. Jenkins and Ms. Hutlock at the October 1996 APAP Educational and Scientific Forum held in Portland, Oregon.

Conclusion

Within the limited constraints of time and resources, the project was able to successfully initiate dialogue and establish a foundation for further exploration of the future of PA education. A repeated theme heard throughout the country in health care circles is that changes are unfolding so rapidly that it is difficult for anyone to accurately describe the health care system even six months ahead. This re-enforces the need for continuing dialogue and study. Several themes emerged in the conference including PAs of the future need to be flexible, to be responsive to the needs of the community and employers, culturally sensitive, technologically adept, and be able to function effectively in teams. There was considerable debate on issues surrounding a PA model of education, the definition of an entry-level credential and the future market for PAs relative to the number of graduates. These issues will require additional discussion and study by the profession.

Anthony A. Miller

1 - From Lexicon to Praxis: Future Characteristics of Physician Assistant Education

Eugene Jones, Ph.D., PA-C

As we approach a new millennium, the number of predictions and proclamations about the future of our profession increases. Seven years ago, an august body of PA educators conducted an in-depth study of the future of PA education and practice in the year 2000. Eighteen recommendations were offered in the categories of didactic and clinical education and evaluation, administration and resources, and faculty characteristics. More recently, the AAPA Education Council and APAP published an issue paper addressing seven specific implications for PA education with strategies to enact them. While mindful of the fact that never before has educational change evolved so rapidly and unpredictably, we are now challenged to extend our reach further by defining future characteristics of PA education for fifteen years hence. What have we learned from the past that might guide us into the future? By examining the lexicon, or language of current and progressive PA curricula, we may hope to predict with some accuracy the praxis or practice characteristics of the future.

Although much of the recent literature on the changing educational needs of health professions' education addresses medical education, it has been suggested that the education of physician assistants so closely resembles that of physicians, that the two models are inextricably linked. If this is the case, then it follows that the future characteristics of physician assistant education are likely to be determined, in large part, by the medical schools most PA programs are affiliated with. In fact, rejection and reconstruction of this notion is supported by several evolving and future characteristics of physician assistant education that distinguishes it from traditional medical education.

The following ten topics are suggested as points for consideration in the evolving debate on educating physician assistants for the future:

1. Consumer Relevant Curricula

PA educators must remain vigilant against being lulled into complacency by an abundant and well-qualified applicant pool. The PA profession cannot afford to produce a product of its own design and expect continuing marketplace satisfaction. The growing multiskilled practitioner movement comes not from academe, but from dissatisfied employers and consumers who desire health care professionals with a different combination of attributes and competencies. Workplace administrators are increasingly reluctant to orient and retrain newly graduated health professionals, thus neglecting to include broader representation within PA program advisory and curriculum committees may indirectly contribute to the growing interest in employer-sponsored training programs.

Recommendation:

Community-based and relationship-centered models of care within PA program curricula should be encouraged and expanded as a distinguishing hallmark of PA education.

2. Computer Literacy.

As a critical element of physician assistant education, computer literacy will become a fundamental prerequisite for successful matriculants and graduates. While the number of medical centers converting to a virtual patient record format continues to increase, accessing text, video, and digital patient imaging records will require the ability to navigate the virtual patient record. This flexible distributed object technology already exists via the Global Information

Infrastructure developed by the Los Alamos National Laboratory. PA programs face a formidable challenge to keep pace with available technology that often exists first in the workplace and last in the classroom.

Recommendation

PA education must stay abreast of evolving technology by establishing collaborative partnerships with business, community and educational consortia within local, regional and national networks.

3. Interactive Core Curricula

Shared curricula via networked lectures and laboratories is happening now and will undoubtedly increase. The economies of scale and scope realized by available and improving digital telecommunication technology may eventually force the traditional classroom-based model of didactic education into obsolescence, as the campus without walls has already arrived. Technologies are available now to conduct a respectable on-line interactive didactic program in the homes of students, and the ability to electronically supplement clinical teaching and consultation exists now as well. The widespread use of a computer-based common core curriculum remains an underdeveloped element of PA education.

Recommendation

Regional and national implementation of a computer-based core curricula linked with standardized outcome measures between and among PA programs should be encouraged.

4. Interdisciplinary Team Practice

Although health professions' students have trained in multidisciplinary team settings for decades, the implementation of true interdisciplinary teams remains sporadic and infrequent at best. Despite the call from the American Boards of Family Practice and Internal Medicine for generalist physicians to work together in well-integrated teams with their non-physician colleagues to enhance the quality and availability of cost-effective patient care, the realization of this goal has not yet materialized.

Unfortunately, in many health care settings and even more so within the community, the 30-year-old question of, "What is a physician assistant?" still echoes with regularity. The failure to acknowledge the PA profession within The Third Report of the Pew Health Profession's Commission speaks to our need to more visibly fill a specific niche within the health care system.

Recommendation

As leaders in the clinical implementation of interdisciplinary team practice, PA educators must continue to emphasize the team approach to health care in multiple settings, particularly within medically underserved communities.

5. Common Core Competencies

Truly successful practice in interdisciplinary team settings necessitates defining common core competencies among clinicians. A point of departure in achieving this definition could be the fifteen educational competencies shared by the three disciplines of general internal medicine, family medicine, and pediatrics identified by Noble, et al. In support of this effort, the Institute of Medicine recently made two recommendations for the education and training of clinicians: (1) that they be defined by a coalition of appropriate educational professional organizations and accrediting bodies, and (2) that these bodies support curriculum reform that teach the common core competencies and essential elements of primary care.

The 1979 Role Delineation Study was the first major attempt by the PA profession to establish such competencies, but the dated findings of this landmark report require a new and methodologically rigorous examination of similar magnitude.

Recommendation

A new role delineation study that identifies common core competencies should be conducted for the purpose of facilitating curricula reform, validation, accreditation and standardization.

6. Cultural Competence

Given the rapidly diversifying population of the United States, it is unrealistic to expect that increasing ethnic and cultural diversity among students and faculty will automatically translate into culturally competent clinicians. Without specific and directed curriculum reform overseen by appropriately trained and experienced faculty, we will not be preparing our students adequately for the challenges that lie ahead.

Recommendation

Inclusion of relevant social scientists such as medical anthropologists and medical sociologists as core PA faculty should be encouraged.

7. Integrated Health Systems Approach

According to the Institute of Medicine, integrated health systems are designed to encompass the provision of comprehensive, coordinated, and continuous services that provide a seamless process of care. Integration combines events and information of events that occur in disparate settings and levels of care over time, preferably throughout the lifespan. The growing trend towards primary care as the entry point to a more integrated health system will require greater curriculum focus on primary care practice, virtual patient records, and continuous health care services over the lifespan. This need has recently been validated by targeted grants from the Robert Wood Johnson Foundation, The Pew Charitable Trusts and the W.K. Kellogg Foundation.

Recommendation

Incorporating and expanding an integrated systems approach within the curriculum will further validate the roles and contributions of PA education to efficient and effective health system reform.

8. Health Promotion and Disease Prevention

One of the elements that distinguishes PA education from medical education is the extent to which national goals and objectives represented within the Healthy People 2000 document are included within the didactic and clinical curriculum. Although somewhat dated and being replaced by more current clinical outcome expectations, the fundamental principles of this document have largely become institutionalized within PA program curricula and philosophy. Encouraged and supported by Title VII funding provided via educational grants to PA programs, the principles of health promotion and disease prevention must continue to be expanded if we are to meet the growing demand for relationship-centered care delivered in an integrated approach that affirms the interaction of biomedical and psychosocial health factors.

Recommendation

PA curriculum content must reflect greater implementation of health promotion and disease prevention activities to ensure successful PA practice in a managed care dominated environment.

9. Relationship-Centered Care

According to the Pew-Fetzer Task Force, clinicians' relationships with patients, their communities, and other clinicians, are central to health and are the vehicle for putting into action a paradigm of health that integrates caring, healing and community. The knowledge, skills and values required to implement relationship-centered care differs somewhat across the three defined content areas (patients, their communities and other clinicians) but the common denominators of building and maintaining patient, team, and community relationships are not new to PA program curricula. This is another area where Title VII grant funding provided a solid foundation and must continue to be strengthened and extended by any available means.

Recommendation

PA education must extend the concept of relationship-centered care as an integral part of the core competencies that uniquely define physician assistant practice.

10. The Entry Level Argument

Perhaps most controversial is the continuing concern over the appropriate entry level degree for physician assistants. While more programs either commence with or convert to a master's degree curriculum, the philosophy of the PA profession remains mired in a competency-based argument that becomes increasingly difficult to defend, particularly in light of growing marketplace competition among clinicians prepared at levels ranging from a hospital-based certificate to master's degrees.

Despite the discomfort associated with reaching consensus, the existing range of PA educational credentials serves as a continuing obstacle to legitimizing the profession, particularly when other health professions exploit discrepant levels of PA preparation to their political and employment advantage. Although the actual variance of curriculum content among PA programs may be less than what it is perceived, the failure to achieve entry level degree consensus will continue to place an artificial, yet troublesome burden on advancing PA education and the profession into the next millennium.

Recommendation

The American Academy of Physician Assistants and Association of PA Programs should jointly study and recommend the appropriate and profession-endorsed entry level degree for PA practice. At this point I will stop and ask if there are any questions.

2 - A Glimpse of the Future

Albert Simon, M.Ed., PA-C

Before agreeing to do this, I was assured that the presenters would have a bit of license: so you need to understand up-front what we are doing. We are soothsaying, we are looking at entrails today. We are predicting. I did take some license in the preparation of my report. My talk is going to center on things that may occur more towards the end of our target fifteen year period. Actually, I titled my section of the presentation "A Glimpse Of The Future, or What PA Education Might Be in 2010. I rounded that off, by the way, it is not exactly fifteen years.

So please keep in mind I am going to be speaking more towards the year 2010 than the year 1997. I would like to look at the extreme edge rather than the near portion of our project period to see what is going to happen. As we enter into this, the first thing I would like you to do as we think about the future, is to think about the last fifteen years. I want you to think about microwave ovens and cellular phones and pagers: all of the things we now consider to be a vital and regular part of our everyday life. By in large, they were not with us fifteen years ago. Remember that we often look ahead through the filter of what we have now. Please keep in mind that I am purposely going to play the role of provocateur with some of the positions that I will take. Now I want you to think about the present. Today we have lap top computers with 586 processors, and an infrared wireless network. With this pace of change, think about where we are going to be in fifteen more years and the technology that we might have at our disposal. With that in mind, lets look at some of the challenges that these new technologies may pose.

I think that PAs are going to be challenged by changes occurring in three different areas. First, there are changes that are going to occur in society in general. Second, the changes we are going to see in the medical care system, and third, changes that are going to occur in the way education is delivered in the future.

Changes in Society

First, let's look at changes in society. One statement I would influence to you emphatically is that in the year 2010, one of the biggest effects on our lives is going to be the World Wide Web or whatever its successor is going to be by that point. We look at the Web today as a way to transfer information. If you have spent time on the Web, I want you to think about all the various content that is out there. Sure there is plenty of information, but look at all the other different Web sites you might have stumbled onto by accident or looked at purposely.

People are having relationships on the Internet and they are doing all manner of things. The point I am trying to make is that if you think the Web is just a way to transfer information, you are sorely mistaken. This is becoming a part of the way we are conducting society, and in fifteen years, it is going to be that much more than it is now.

Think of being connected to all of those people--all over the world, millions of people. If you are going to have a business, even if it is a health care business, and you are not soon on the Internet in a big way, it will be like not having your number in the phone book.

So the Internet is going to take us places that we really can't envision fully right now. I think we are going to see that everybody's home, or at least most people's homes, by that point, are going to be connected to the Web and going to be connected in a way that we don't think about now. Presently, in my home I have a telephone, cable TV and my computer. We see those things as different devices today. In the near future, I think we will have one device to replace all of these items. We are not going to think of the phone and the computer as different things anymore. It is going to be one integrated unit that is going to do all of the tasks that those three or four devices do

for us now. And probably, at that point, we will even have a pretty good portable equivalent and we will look back and say: remember when we carried those seven pound laptops around with us? How did we do it? We are going to have this little palm-held device that is going to do far more than the big machines that we are lumbering around with right now. Remember, the future is closer than you might think.

These new technologies are going to enable us, as consumers, to access many, many different services from our homes. So I think we are going to see a big shift from business being conducted out there in a world, to business being conducted largely within the home. I include health care in that business reference. A large portion of health care will be performed at home. Perhaps it will be the rare occasion when you need to physically go to whatever provider that you are going to see. Most homes will be equipped with a "doc" station that will be an extension of what is essentially now a home television. This device will have a medical attachment that is going to allow people--from their homes--to be medically monitored.

I don't mean that in a big brother way. I mean that if I have high blood pressure, hypercholesterolemia, or whatever disease, I can go and stick my finger into a port on that device every morning and have my blood pressure checked, pulse checked, cholesterol level checked; all done just like that. All of the data will automatically be transmitted to the provider. If the parameters are either way up or way down, an alarm will sound to draw the attention of my provider. It is just like me getting up now and taking my pill in the morning, that's automatic. The presence of this increased technology is to engender in consumers this immediate gratification need. When we want a service, we want it right now. It will be absolutely unacceptable to me as a consumer (if I buy into your health plan) for you not to be available to me, from my home, twenty-four hours a day, seven days a week. I want to be able to walk into the living room, turn on this device and you to be there, to answer questions, to do programming for me, on demand. And the technology will make that possible, in large measure. I can go home and access a number of services through the telephone now. I can call JC Penney 24 hours a day, seven days a week, all year around and there is always somebody there to talk to me about JC Penney. We are going to expect that, as consumers, from our health care providers, just like we do with other services.

Change in Medical Care System

The next big area of change is in the medical care system. We are obviously going into an environment that is going to be rich in managed care. One of the comments I hear now as we make this transition, is that there is a lot of consumer dissatisfaction with managed care. Now, that may be because we are in a transition period; but if managed care organizations are not going to provide services that people are happy with, competition is going to mean that somebody else is going to come in and fill that void. They are going to have to provide that service in a way to satisfy consumers.

So managed care as we know it today may change and be very different in the next decade. I also see the development of what we will call super providers, very large corporate entities. These conglomerates are going to have access to large sections of the population in terms of managing their care. And they are also going to want to have lots of presence on the Internet, and all these other communication devices that we've talked about. They are going to market in ways that we, today, don't really think about marketing health care. If you look at the way we market health care today, versus what we did ten years ago, it is dramatically different.

This concept of health care marketing is going to be changed and massaged and expanded much more than we see now. These super providers are going to have a presence in your life like you can't believe. When I say "Quality is Job One," who do you think of? You think of Ford. It has

been drummed into your head. The super providers are going to have the same sort of effect on your life in the future; they are going to be that much of a presence. They are going to become the General Motors of health care.

In terms of education, one of the effects that these super providers are going to have is to cause a much larger percent of affiliations occurring for student training to be shifted into managed care settings. As these organizations become more and more centered on the way they provide care, they may even go on to provide almost all of the entry level education.

I think self-care is going to be a large direction for the health care market in the future. People are going to be expected to take care of themselves, take more responsibility for their health, and to manage a lot more of these problems through the aids of technology, without having to come to the office.

I have already given you an example of how monitoring chronic disease might occur. We will see the production of treatment "modules" that will provide services at home. So, if I have high cholesterol, for example, and Acme is my health care conglomerate, the super provider in my area, Acme is going to say to me, through the "doc" station, "Well you have high cholesterol and you are one of our patients." Acme will provide educational programming that I am going to watch. I am going to have a diet that they are going to prescribe to me. The diet will be delivered to my home by a company like Federal Express. I am not going to have to go to the supermarket and get it. They are going to say, here is what you need. They are going to have it delivered to you, no problem, don't worry.

All this is going to center around the patient and their wants at home. Acme is also going to be willing to say, as you reduce your cholesterol ten points or twenty points, we are going to provide a discount on your insurance or my premiums. So there is going to be a motive for patients to participate in these sorts of systems.

Someone earlier today mentioned an innovative new affiliation with new health care players. We are going to see affiliations in the future market. Many of those affiliations are going to involve pharmaceutical companies. Pharmaceutical companies have positioned themselves to make a shift into disease management. You only need to look at their home pages on the web. This concept is very strong in their corporate strategies now. They are no longer going to be happy to say, "Oh, just prescribe our drugs." They want to be in the management of disease and they are poised to do that in a number of different ways.

So, alliances will form between these corporations; large health care conglomerates and other corporations who are going to be bargaining for health care for their employees. Maybe even entire states are going to be bargaining for health care packages.

The PA is going to have a new role in this kind of system. I think PAs are still going to need to be technically competent, but there are other things that PAs are going to need to be able to do to be competitive in this system. These new tasks include functioning as a case manager. When I say case manager, I mean someone who may be overseeing a large group of patients, many of whom are monitored by home devices. It will be the PA's decision to determine if you need to come in to be seen.

I also think PAs are going to be involved in designing systems of care. I would like to repeat that, to me the key identity for all of this is going to be making the consumer satisfied. The market is going to be so competitive, if you are not satisfying the consumer, they are going to go elsewhere and they have lots and lots and lots of choices. Physical distance is not going to mean as much as it does now.

So people are going to have a lot of choices; a lot of the PA's job is going to be satisfying the consumer. We are well poised with the way we train PAs to do that, but we are going to have to learn to do it in different mediums.

Changes in education

Our third area is the way education is conducted. I see a couple of things here that we need to mention, as sort of a caveat before we begin. There are two landmark events in our society we need to realize and relate to. One is MTV and the other is Terminator 2 --hallmarks of culture, right? What I would submit to you is that both of those have had a profound impact on the younger people in our society. I am not trying to be pretentious when I say that you, I can't understand the way my son and his friends view those particular things.

As educators, we need to understand what this generation is watching. They can pop in the video of Terminator 2 anytime they want and watch this guy morph in and morph out, then we stand up in the room in front of them, talk at them and draw things in white colored chalk on a blackboard and wonder why they are not interested? As educators, we can't compete with some of these things, but we need to look at ways to use the new technology in order to allow us to tune in more with what is going on, to make things more interesting and to just change as society is changing. High-tech presentations are becoming more and more commonplace in today's society, so we have to learn to be comfortable with technology. We also have to adapt to the fact that not only are we going to need to be comfortable with technology, we need to be comfortable with a new environment. An environment that extends beyond the walls of the classroom. The word campus isn't going to have the meaning that it does today.

People are going to be relatively unwilling to come and sit in your classroom for four years. Students will want you to bring the education to them. And even more, they are probably going to want it when they want it. They don't want it from 8 to 10 Monday and Tuesday because those are the days you want to offer the course. They want to do it whenever they please. They want access to it. So we are going to have to be comfortable as educators in that environment that extends beyond the classroom and extends through video conduits to locations we had not thought about before. We are going to see the development of regional sorts of programs that are going to have far ranging implications. I might sell courses to other programs in other parts of the country. I will be able to attract students from other parts of the country that I would not be able to attract otherwise. We have to learn to use the technology.

We also have to understand that a lot of our curriculum is going to be offered on the Web or Internet so it will be able to be accessed, anytime, anywhere, by the people who are using it. We are going to have to adapt to these new technologies.

Now the $64,000 question to me is as an educator, "How can we use these new technologies to improve access to and quality of what we do?" I would implore all of you, as fellow educators, to take this opportunity, rather than being threatened by the advent of a lot of these things. We all know it can be threatening, but to view it only as a threat will be a great opportunity missed.

To me, the advent of these new technologies is as dramatic an improvement in what we can do in education as the invention of chalk and the blackboard. It is that much of a revolution. We have to embrace it more than we have before.

So, are educational programs poised to respond to these particular challenges? I think to some extent they are. With a rather broad brush, I would like to paint some skills that I think will be key skills for physician assistants to have in the future:

One key skill for the PA of the future is flexibility. That means generalist training which will allow for easy transition between assignments. If the workers of the future think they are going to

be doing the same thing all of their forty work years with a corporation, they are sadly mistaken. We need to make sure that the preparation we provide is sufficient to allow graduates to easily and quickly adapt between different sorts of assignments. I think employers are going to expect it and I think that is certainly reasonable.

The second key skill is communication. The ability to relate to patients. This is nothing new, we do that now, but in the future we need to relate to patients in various settings, including through video and electronic media.

The third key skill is innovation. It is a tough one to teach. The competitive marketplace that people are going to work in, in the future, is going to demand innovation. These future providers are not going to be expected to just pick up an otoscope and diagnose otitis media. They are going to be expected to constantly assess the way care is provided, to provide more efficient, more quality, more consumer satisfying care. Remember that in quality circles, quality is defined by the consumer, not the provider of the product.

The next key skill is being multi-skilled. Successful providers are going to be the ones that are going to bring more than one skill to the organization that employs them. Employers will expect every PA to bring additional skills to complement their basic PA clinical skills.

Another key skill has to do with a term I coined, technophilic. I know a lot of people that are technophobic, but I think the people in the future will have to be technophilic. We are going to need to be willing to constantly adapt to emerging technologies. All of us were frustrated as we went from using DOS to using Windows. The point is, anything we buy or use now is going to be replaced with something different. So, we have to get out of the mind set that we will be trained to do something a certain way and that is the way we will do it for the rest of our lives.

The final, and perhaps the most important skill, is vision. I think PAs are going to have to look at the rapidly changing, very competitive market and determine; here is where we are--and here is where we are going to need to be in two years or five years. Nothing is going to be static in this competitive kind of environment. You are going to have to be ahead just in order to keep up.

So those are my prognostications. The time ahead of us will truly be exciting and challenging.

Thank you.

3 - Educator's View

Brenda Jasper, M.Ed., PA-C

The approach of the millennium allows an opportunity to diligently review the current educational structure and function of the profession. The changes of health care reform challenge us to visit theoretical and practical policy issues for the future. The Physician Assistant profession's development grew out of a necessity to expand primary care services and accessibility for underserved populations. The PA profession represents the manifestation of a much needed innovation in medical education to address the health care needs of the country and the world. Midlevel health care providers do, without a doubt, provide cost-effective health care. Succesful resolution of health care disparities leaves no room for complacency. Active, conscious, persistent, visionary pursuits are necessary for assuring future generations a socially and morally equitable health service delivery system.

As our world broadens globally, we must assure recognition and respect for cultural diversity within the educational system and the populations served by the profession. The PA profession has not seized the opportunity to expand beyond the parameters of this continent. The international marketplace offers opportunity for expansion far beyond our current limitations. With the horizons of intercontinental relationships, reward of professional proliferation brings responsibility for broadening our concepts of needs, expectations, value systems, healing practices and cultural demands. Viewing the planet from a culturally limited perspective disallows respect for the diversity in which we exist. The American culture tends to remain very self-centered and narrow in relationship to others, resulting in an ethnocentric approach to interactions. The educational forum must construct a platform to provide the educational requisites to service and accept the increased demands within the global society of the next century.

Within the global context, curricular content must include a broader definition of academic excellence. Realizations of goals consistent with our mission is contingent upon a universal desire to allow survival of nations of peoples with varying belief systems. Curricula must include content on diverse populations, holistic health care, traditional healing, international, and environmental health.

In many arenas, anti-affirmative action has become a point of discussion, interest and political debate. The PA profession, at this crossroad, must assume a dutiful role of assuring the commitment to meeting the needs of underserved populations. The futuristic agenda must support and defend multicultural incentives and policies, funding, theory and practice. Inclusion of behavioral, social, ethical and ethnically diverse content into curricula will allow recognition and understanding of differences and similarities for positive, productive learning.

Some legal and political factions are turning against race as a basis for admission criteria in places such as Texas, Louisiana and California. The US Supreme Court this year passed a ruling that diversity is not a rationale for race-based preferences. These types of mandates necessitate creative mechanisms to allow race-neutral ways to help minorities access education. Utilization of categories such as educationally-disadvantaged, school quality and location, first generation college student, and low income eligibility help, but definitely lessen ethnically diverse acceptance. Is diversity accepted by this profession as a value? In this new climate, a line must be drawn in order to continue our efforts to educate individuals committed to the needs of underserved populations. Or, will the profession elect to be satisfied with production of the major numbers of minority graduates only from programs located in minority communities dedicated to the education of minority peoples? Preliminary results from the Association of

Physician Assistant Programs' Minority Attrition and Retention Contracts, sponsored by the Department of Health and Human Services, reflects a definite place within the profession for the education of minority students at minority-based programs. We must change the non-proactive role of allowing only specific schools to be culturally diverse. If affirmative action is not our commitment, then minority students are doomed. We must stand for what is right, and preserve the nature and founding premise of the profession.

Western medicine has been regional, systematic and focus-oriented. This value system is limited to the mental and physical realms only. Within the global community, a holistic approach to medicine is evident. Acceptance of holistic concepts opens awareness of traditional healing methods beyond the current didactic content. With health care costs rising, many individuals within this country are turning to alternative healing methods used in other countries. Curriculum must include exposure for students to assure a sound basis for problem solving and patient management within the broader scope of global health care.

The team concept has largely remained conceptual over the years. However, within academic health centers and managed care institutions, collaborative learning is beginning to foster a realization of the health care team. The PA profession is a true example of cross training by its inclusion of multiskilling, from various disciplines to create a primary care provider educated at reasonable cost in a short period of time. As multidisciplinary students share didactic and clinical experiences, they develop respect for other professions and learn methodology for working together in a team. The needs of the world's communities can benefit from the utilization of the broader educational basis of the PA profession.

As the world moves into a high technological cyberspace, the PA profession must maintain a grounding in the realities, strengths, and commitments of a philosophy and ideology of improving the health status of all people. Utilization of these technologies permits expansion of educational reach to assure distance learning in remote areas of the world and increases the numbers of health care providers in those communities. We should progress towards forming linkages with educational institutions around the world credentialing, organizing curriculum and fostering community-based educational programs. The movement into communities away from institutions formulates implications for PA training. Student pools from within the community can assist in generating needs-based curricula within the standards of accreditation. The likelihood of yielding a significant return to communities increases. Linking of technology to foster a root's provider base for underserved populations is admirable.

PA programs have had no formula for growth. APAP and AAPA and CAAHEP can ill afford exponential growth without any control, purpose, order or direction. The profession has struggled for over twenty-five years to enjoy a respectable place within the medical community. Without thoughtful academic planning and purpose, quality and need can be seriously threatened. A vivid example is in the existence of only one historically black college and university (HBCU) based PA program since the inception of the profession. The educational organizations must assure the profession's direction through scholarly counsel.

In summary, the recommendations are:

1) The PA educational forum must provide policy direction on affirmative action to assure continued commitments to concepts representing the diversity of the population.
2) The PA educational contingent must again be on the cutting edge of innovative educational theory reflecting the cultural fabric of the world.
3) Curriculum must include international health, traditional health, environmental health, holistic health and multicultural diversity in the content.

4) Community-based need for the development of PA programs should be used as a criteria for funding and sponsorship of PA programs.
5) International expansion of PA education should be established to address the needs of underserved global communities.
6) Multidisciplinary team concept-based didactic and clinical education should continue and expand as a critical curriculum component.
7) Basic theoretical tenets of the educational process should remain primary care-focused to meet the needs of the broader global community. The educational future of the programs must focus on our foundation of strengths, commitments and values of equitable health care with direction and purpose for patient care needs and which guide the marketplace.

4 - Health Professions: Projections of Supply & Demand

James Cawley, PA-C, MPH

With regard to the future of PA education, we present our assessment of the critical issues. I come to these views from the perspective of working with major health work force policy groups considering future issues. I have been fortunate over the last couple of years to represent the PA profession to the Council on Graduate Medical Education (COGME) and the US Bureau of Health Professions. This experience has allowed me to gain insight into the broader picture of the US health care work force. My work force policy education permitted work with COGME and leaders in health work force policy issues, like Marc Rivo, Fitzhugh Mullan, and David Kindig. The central message that I state is not one of doom and gloom -- but one of reality. It is the reality that I see in the data on health professions' numbers looming on the health care work force horizon. I see the US health care work force becoming increasingly crowded. I begin with the physician component of the work force. For a number of years, the United States has been training too many physicians. COGME, the Physician Payment Review Commission, the Institute of Medicine, and the Pew Health Professions Commission have all predicted that the US is likely to have a surplus of physicians, especially specialty physicians. By 2000, certainly by 2010, we are likely to have an excess of physician providers in the health system. Clearly, this has implications for the PA profession, particularly in light of the recent trend of expansion of our educational programs and enrollment.

The Pew Health Professions Commission Report indicates that there are other health professions besides physicians that also seem to be multiplying at a rapid rate: pharmacy and nursing; these professions may also have significant overcrowding in the future. Let's look, for a moment at physician work force trends. In 1996, there are between 675,000 and 700,000 physicians in the US health work force. That translates into 203 physicians per 100,000 persons. If one projects using the current number of medical school graduates annually (16,000 persons per year), you arrive by the year 2010 at 219 physicians per 100,000 population.

Now, Fitz Mullan likes to say that an excess of physicians is a relative thing. That is, the idea exists in the mind of society and policy makers as to whether or not we have too many physicians. America has seemingly to this point been able to absorb the tremendous bolus of physicians that have been produced over the last ten to fifteen years who have entered the US health care system. Apparently, the US health care system has demonstrated the capacity to absorb these physicians without too much adverse reaction or negative consequences.

Interestingly enough, the strong growth of the PA and NP professions has occurred in the face of what seems an adequate or even excessive physician population. This is a curious thing that someone ought to further analyze. The delivery of the GMENAC Report caused a number of PAs to hedge their bets on the future of the profession.

I personally know a number of PAs who went out and did other things around that time for fear that the GMENAC Report contained truth and felt that a MD excess would have a negative impact on the profession. What I think we have to remind ourselves is what the GMENAC Report in 1979 and 1980 said -- we would have too many physicians in the year 2000. So the true impact of GMENAC is not going to hit until three or four years from now. All we knew in 1981 and 1982 when we were reacting to the GMENAC Report, was the fear that seventeen years from then, things would get tight. And, I think what we have to realize now is that GMENAC may have been right and that, GMENAC's prediction of too many physicians may not have its true impact until several years from now.

Now let's turn for a moment to PA supply and demand within this context of the health work force. I take some of these statistics from the fine work that Bert Simon has done taking up the cudgels from Dr. Oliver's continuing annual survey of PA programs (12th Annual Report of PA Educational Programs in the United States).

We now have 85 accredited PA programs, a number up by 23 since last year. ARC-PA estimates that there maybe thirty or forty more PA educational programs in the queue. There are 5,558 PA students enrolled, a number up sharply (twenty percent) from the 4,400 enrolled in 1994. There are somewhere in the range of 3,000 graduates per year coming out of PA programs. Is that the appropriate number? Is that too many? It is very difficult to say because the hard part of the health work force policy equation is not so much the supply side. We know the numbers coming out of programs. We have estimates of graduates and so forth. The hard part is to evaluate the demand side -- what the market is going to be. We must decide whether or not the market can accommodate that number. We must determine whether or not the work force trends are going to be such that we will require fewer PAs, or fewer physicians, in the work force in the year 2000.

One of the difficulties is that we have imperfect measures of demand. The PA profession has used what I term proxy measures of demand. PA educators, and consultants to PA programs have tried to assess what the future markets may be. I mention here the US Department of Labor projections; they seem to be rosy in terms of what the demand for PAs will be in the future. We have and continue to this day to enjoy a very comfortable place in the medical market in that our services appear to be in demand.

The PA profession has used the figure of five to eight job opportunities for each PA graduate. The epidemiologist in me says I am unsure if that this is really an accurate estimate of the demand for PAs. Most know how this number comes about--the figure is derived from asking directors on the survey that Mr. Simon has done how many opportunities are out there for recent PA graduates.

If we look at this data and analyze it for a few seconds we realize that there are many potential biases built into this particular estimate. Biases could exist in the PA program director who says, "My own graduates have lots of opportunities." What PA program director would not want to say that? But you also have the situation where there is a lot of regional variation, circumstances of redundancy. Often, the same job gets sent out to all PA programs and every graduate and every director counts that as a job, so there is lots of room for error.

What is the real demand for PAs in the current medical marketplace? At the moment it's very solid, perhaps two to three jobs per PA graduate. But, I am not sure we can say confidently that it is any higher than that. In fact, current statistics show the rate has fallen. Actually, it should not be a rate, but a ratio for those of you who are technically-oriented. The ratio fell from 6.8 in 1994 to 5.2 in the current survey.

Before I move onto the Nurse Practitioner component of the work force, recall the numbers, at least as determined the Bureau of Health Professions and COGME in terms of the projection of numbers per hundred thousand, we gave you. There is also two other notations. The notation of the ideal ratio in managed care systems (Marc Rivo and Dave Kindig estimate) is somewhere between 145 and 185. We are talking about now 203 and projecting that out to 219. Also, we know within the physician work force the problem is physician specialist excess and physician specialist under utilization. I will come back to that in a few minutes.

Nurse Practitioner education has seen a similar expansion of its numbers. Right now, there are more than 11,000 NP students enrolled, in 462 Nurse Practitioner education programs set in 190 institutions. The vast majority of these offer the Master's Degree. I think there is clearly

some implications for PA education within those sort of scary statistics. I think we also have to realize that in some places, some jurisdictions, nurse practitioners have some advantages over PAs in the work force in terms of opportunity.

In my own home state of Maryland, PAs still do not have prescribing authority. That has hurt PA employment opportunities because nurse practitioners, if you are talking about the market consisting of managed care organizations, what you are talking about is an advantage that an NP might have in being hired for those particular kinds of jobs because most of them consider PAs and NPs to be interchangeable types of health care providers. Unfortunately, in terms of some of the practice authorities that they have, they are not quite interchangeable, and NPs have a distinct advantage.

It is unclear what the market may be in terms of managed care systems for PAs and NPs. Some of us have heard horror stories of various managed care systems that have actually purged their PA and NP staffs. This is not a good trend. It is certainly hard to say with confidence that the market for PAs and NPs is strong and unlimited in managed care systems because I don't think it is. It is strong in some areas; that is not to say that there is not a lot of PAs and NPs being used in managed care systems, but I think we have to realize that is not a firm and unlimited market for PAs.

Now some work force issues, and then I will talk about some implications for education specifically, and then shut up. I think that we have to consider the impact that could occur to the health care system and to the health professions that stem from the expansion and the underemployment of physician specialists. John Weiner of the Johns Hopkins University and others predict that there will be 100,000 too many specialist physicians by the year 2000. Whether or not that comes true, it is certainly a warning signal that there could be a lot more physician specialists than we need in the work force. Part of the problem has been the imbalance we have had in graduate medical education.

Also, what I see on the future in terms of work force issue is the possibility of some physician resentment -- a physician backlash. Those of us on the Internet have seen comments from physicians expressing concerns about the fact that PAs or NPs utilized in emergency departments may be taking away jobs from physicians or family physicians who work in those kinds of settings. It is not hard for me to imagine that if we have physician specialists tripping over themselves that sooner or later they are going to say, "What about these PAs and NPs?"

In 1981, Eugene Stead wrote a paper published in the American Journal of Medicine which said, essentially that as much as he likes PAs, physicians are human, and if you starting hitting physicians in their pocketbook with regard to PA or NP utilization, physicians are going to react the way you would expect any other health profession to react. And I think we have to be cognizant of that.

Another issue that affects in PA education is the question: Can we confidently continue or can we with good conscience, continue to expand our numbers of educational programs and educational graduates? As I read the tea leaves, I think we have to tackle this issue head on. Then the question becomes, "What organization in the profession tackles it?" Maybe later we can get into a discussion as to whether the Academy is the appropriate group or, whether APAP or ARC is the appropriate group. We can also ask, "what any of these professions organizations can do at this point to address this issue, and what any of these profession's organizations can do to develop concrete action?"

Let me state a couple of implications of all this for PA education. We have to realize that the work force is going to become increasingly crowded. We must also realize that we are

going to have to take action in an attempt to preserve the wonderful thing that has been the PA profession up to this point.

So one of the questions to the profession is, "Do we have a glut?" I have to use the word glut, but what I mean is, can an oversupply of PAs be avoided? Can we do anything? At this point, can any of the profession's organizations do anything at this point to avoid having too many PAs in the work force down the road? Part of the challenge that exists already--because we have expanded our numbers so rapidly and we have so many programs and graduates--is how to keep the quality of our product. I think that is an aspect that we should discuss in some detail. How do we ensure that, despite rapid expansion, we keep the quality of the individual graduate.

Another group that I did not mention and still continues to exert pressure in the work force is International Medical Graduates (IMGs). I am very sensitive to this issue because we have had lots of battles with IMGs in Maryland, and we know there have been battlegrounds in other states as well. Physician groups and the AAMC are starting to get very worried about the proportions of IMGs seeking to enter US graduate medical education and ultimately seeking to enter practice in the United States. Dr. Mullan wrote an editorial dispelling the myth that international medical graduates go into rural areas in primary care more so than do American graduates. Not true.

The last point I would like to make, and I am sorry I did not hear all of Dr. Gene Jones' presentation, but I would like to address the issue of competency-based education, and where PA education ought to be set in terms of the academic recognition for PA education. I think that we are going to see increasing competition for positions among family physicians, NPs, and PAs. Is it viable, given that competition, and given that reality, that we can have a circumstance where the competency-based model still exists? Can we still say, "Yes, we can train a PA and the PA that graduates from a community college is just as good as the PA that graduates from university medical center." I am not sure anymore that we can do that and be viewed as credible. I am aware that this assertion violates a lot of sacred tenets held by persons in this room, and I am aware they are ones which have served the profession well over the last thirty years.

PA educational programs based in a community college setting turn out good graduates and are well-respected in our community. Yet I am not sure that we can continue to have that circumstance exist, or whether we need to move toward higher academic degrees given for PA education. Can the competency-based philosophy of PA education remain alive when what surrounds us is credential creep?

NP graduates earn master's degrees and MSN degrees. We already said that NPs compete with PAs for many positions and, even though we like to keep it wide open, that you can skin a cat in many different ways and you can educate a PA this way and that way and you all come to the same final product. That's attractive in theory, but I am not sure it is going to fly in the health care work force in the future. So with that, I will close and entertain your questions. Thanks for your attention and I hope I haven't offended all of you.

5 - Rural Practice Focus

Jennifer Krueger, PA-C

I am currently a member of the AAPA Education Council and past president of the Montana PA Academy and the current legislative coordinator. Before becoming a PA, I was involved in pharmacy education and preventive medicine in Wisconsin. I was excited about the opportunity to come here and thought I would try to bring one perspective on rural and frontier medicine and what PAs think about the future of education. I took the opportunity to do an impromptu survey of some practicing PAs in Montana, Wyoming and Idaho and asked them what they thought about the future of PA education. I also talked to some educators at Montana State University, University of Montana, University of Wyoming, and the director of Montana AHEC. Some consistent themes emerged.

Currently, about fifty million Americans live in rural areas and 21 million of them are in areas that do not have enough health care professionals to meet primary care needs. Even though about 20% of the US population is living in rural areas, only about 9% of the nation's physicians are practicing there. Montana is an excellent picture of the shortage we are experiencing in rural areas. It is the fourth largest state in the United States with 148,000 square miles, but only has a population of 846,000. The largest city is barely over 100,000.

Rural hospitals have closed because they are unable to meet staffing requirements for Medicare and Medicaid. So in 1982, Montana began addressing the rural health care problem with a governor's task force, and in 1987, the legislature authorized the medical assistance facility, or MAF. This is a limited service hospital, unique to Montana and staffed by PAs and NPs. The rural communities could then retain a basic level of emergency care. There are also certified rural health clinics, which are primarily staffed by PAs. Native American reservations also recruit PAs and are experiencing tremendous health care provider shortages.

In 1993, the Montana Health Care Authority was formed, which included a PA member. The project studied rural primary care and reported the greatest need in Montana was for mid level providers. In talking with colleagues, three main themes emerged:

(1) Primary care rotations need to be rural and educational programs should focus on and encourage rural primary care rotations whenever possible. Recruiting efforts should also encourage rural students to apply.

(2) PA education should emphasize the new age of telemedicine. The clinical medicine program currently operates in about forty states. Video consultation, telecommunication and other methods of information acquisition are critical in the rural and frontier areas. This can help address those feelings of isolation that PAs experience out in these sites.

(3) More integration and interaction between programs, practicing PAs and constituent chapters. There is some anxiety about the number of programs starting and the shortage of PA educators. Emerging programs should tap into resources of constituent chapters with programs that are developing, not only to provide input, but perhaps to bring more PAs into education. There is a shortage of PA educators therefore methods should be developed to involve practicing PAs, whether it is lecturing, doing something on the telemedicine network, or other types of involvement.

6 - Health Professions Foundation View

Jennifer Ruzek

Hello. My name is Jennifer Ruzek. I am a Research Associate at the Center for the Health Professions in San Francisco which is affiliated with the Pew Health Professions Commission.

For those of you who are not familiar with the Commission or the Center, I can give you a short description of both. The Pew Health Professions Commission was established in the Spring of 1989 with the mission of assisting health professionals, work force policy makers, and educational institutions in responding to the challenges of the changing health care system. The Pew Commission is actually administered by the Center for the Health Professions at the University of California at San Francisco (UCSF), which is the policy shop that carries out the work of the Commission. The Center is an inter-disciplinary group, and we report to the deans of the four schools at UCSF which are: dentistry, medicine, nursing, and pharmacy. The Pew Commission is also inter-disciplinary, made up of leaders in academia, care delivery, business, and government. Both the Center for Health Professions and the Pew Commission are funded by the Pew Charitable Trusts, a philanthropic organization located in Philadelphia.

To briefly outline my comments, I want to first talk about the changing health care environment--which I have described in more detail in the handout--and then discuss specific recommendations for PA education. Finally, I would like to talk about what Pew is doing to look at PAs.

First, there are four important realities that one should keep in mind when thinking about the dynamic health care environment. The first is that the system is too costly to sustain. It consumes approximately 15% of our GDP, about one trillion dollars annually. It is a system that is too costly for providers and for payers.

The second point is that there is an enormous excess capacity in the system. Excess capacity exists in terms of too many providers as well as too many hospitals and hospital beds. When you look at supply and demand rates in cities with high managed care penetration, you see that the supply of hospital beds tremendously outweighs demand for those beds. At my own institution, UCSF, we have had occupancy rates as low as 24% - which have ultimately driven the merger between the UCSF and Stanford University Hospital, two of the largest tertiary care centers on the West Coast.

The third point I'd like to mention is that the system is not performing. Despite the tremendous amount of money being spent on health care in this country, if you look at crude health status indicators such as female life expectancy or infant mortality, we have worse outcomes than comparable Western nations. Additionally, while some populations have access to world class health care, others are left completely out of the system or have very poor access. So with all these factors, we have a system that is not functioning.

The fourth and the most important point is that, in 1993 we had an option to reform health care with the Health Security Act. For better or worse, we did not go with this policy option and instead turned health care over to the market. It is revolutionizing the health care industry much faster than we ever anticipated. For those of you keeping track, we are actually in 2004 of the Clinton Plan, in terms of the number of people in managed care and the number of contracts negotiated through purchasing cooperatives. So we have many of the effects of the Health Security Act, but without the benefit of public input or regulation.

There are also other impacts of the system change. We are going to be seeing more managed and integrated systems as a result of the rapid consolidation of the industry. We are already seeing the formation of large integrated delivery systems, and the wholesale purchase of

health care assets. By the close of this year, Goldman Sachs estimates that we will spend nearly one hundred billion dollars acquiring the assets of health care in this country. Some of these integrated delivery systems are going to be established through partnership or strategic alliances and some are going to be outright purchased. These large organizations are also going to be held accountable for quality and cost.

And they are going to he held accountable for cost and quality by the purchasing cooperatives. The latest numbers that came out last month state that there are now about 150 purchasing cooperatives in the United States. Of those, there are only 25-30 that are actually purchasing health care for their groups. But they are exerting considerable pressure on the plans in terms of producing outcomes data and reducing premiums.

The other point I'd like to make about these large, integrated delivery systems is that, at first, they are only going to be concerned with removing excess capacity from the system. They will be looking to wring that out of the system, but long-term competitiveness is going to be based on managing the health of populations.

There will also be more innovation and diversity in approaching health, putting more emphasis on psycho/social/behavioral health and alternative treatments and therapies. We going to see less focus on treatment and more concern with prevention, education, and management--all efforts to improve the health of the entire population.

Many changes will need to take place when the new health care system emerges. The first is that the workplace will need to be redesigned. The bullet points on my slide are actually very applicable to many other industries where the nature of work is changing in the 90s. The workplace will be guided by principles of flexibility, innovation and adaptability. In terms of outcomes, health care will need to focus on cost and quality because purchasing cooperatives will hold plans and providers accountable to these standards. Second, the workplace will be performance driven and information based. It will be the information that will be key to providing outcomes data. Third, the workplace will be team oriented. Fourth, it will be customer determined by the dual customers: purchasers and patients.

Next, professional practice will also be re-regulated. Although appropriate for a different era, regulation is now criticized as increasing costs, restricting managerial and professional liability, limiting access to care, and having an equivocal relationship to quality. Perhaps most seriously, regulatory bodies are perceived as largely unaccountable to the public they serve. In short we will need to:

- Base practice acts on demonstrated initial competence, allowing individuals and professionals to expand their scopes of practice and use them to the fullest extent of their knowledge and training.
- Focus professional boards on public and changing care system needs to truly improve the health of the public.
- Enlarge the role of the consumer not only with representation on regulatory boards, but also to the extent that consumers will truly be informed with relevant information about practitioners.
- Require continuing competency requirements to make the system effective and efficient.

We also need to "right" size the health professions. The next recommendations are from the Pew Commission's Third Report, which many of you are probably familiar with. This is a very abbreviated summary, but we are recommending a redirection in focus from our academic health centers which have produced practitioners without looking out from around the walls of the Academic Health Center. A new demand perspective will require:

- Reducing the number of physicians produced by reducing both residency positions as well as the entering medical school class size.
- Redirecting nursing to emphasize baccaulareaute and advanced practice degree programs.
- Reducing the number of pharmacists.
- Expanding public health programs and professionals--particularly encouraging public health to bridge gaps between the public and private sectors where partnerships may not have existed in the past.
- Expanding the number of multi-skilled allied health workers.

Education, like everything else in the system, will need to redirect itself. There are general guiding principles that education will need to focus on: First, education must be cost, time and performance accountable just as providers and care delivery organizations will be. Second, the new skills that will be needed in the changing system will need to be taught. Care delivery organizations in some of the allied health fields are looking into creating their own educational programs if the schools cannot produce graduates with the proper skills. Managed care plans have toyed around the idea of creating their own medical schools to produce the types of doctors that will practice well in managed care organizations (MCOs). While we are not advocating that, it is imperative to understand that educational institutions must teach skills for the 21st century. Third, we must move training into ambulatory and community settings where graduates will be practicing. Fourth, educational institutions must create partnerships with organizations that they have never conceived of partnering with before; clearly, with MCOs and care delivery, but also with other schools, information technology partners, etc. Finally, institutions must create a funding base tied to educational mission of the institution.

In the past, academic health centers have cross subsidized education with clinical income, research support, public subsidies and tuition. But as the clinical income stream is drying up, educational institutions are going to have to tie funding to the educational mission.

Now, I would like to move on to what this new environment means for PAs. What does it mean for the future of PA education? When talking about PAs, I have two questions. The first question is really a mission question. It's driven by the last three questions that I have. My question is this: The PA profession was originally founded on a physician under-supply and a physician maldistribution problem, and it was designed to keep costs low. How is this changing now that we have an over-supply of physicians and the balance between primary and specialty care has shifted? If you look at the latest AAPA data on PA practice--and it depends on how you want to define primary care and specialty care--but you're looking at 50%, or perhaps even more than 50% of PAs practicing in specialty care, and that is a change. I think that the mission question needs to be addressed. What is the mission of the PA profession? When you start thinking about that mission question, I think that we first have to ask: What are the emerging trends in PA practice in managed care organizations? What are MCOs looking for? Talking to many of these managed care organizations, I get varying answers. Some are looking desperately to staff urgent care centers, others would jump at the opportunity to get a PA trained in a specialty to staff certain department. Others say "we have enough NPs, and we're not looking to hire any more PAs." So some of these differences are regional, depending upon managed care penetration, but I do believe that they need exploration. Next I ask: What kinds of relationships do you have with local care delivery systems? This rapport will be essential in determining what managed care organizations need.

Training is also another area that is important. Where is the best focus? Ambulatory and community settings, where care will be delivered in the future? Or, do we need to see training

continuing in inpatient and hospital based settings? This takes me to my next question. The Pew Commission, COGME and others are calling for a reduction in residency slots. Will PAs and NPs be called in to replace residents? It opens up a whole new can of worms. First, how is this going to be paid for without a Medicare GME subsidy? In areas like New York City, care that was formerly provided for by residents may just disappear from the hospital. Those populations will have to go elsewhere to receive care. Further, we are not going to see any kind of Medicare or GME reform legislation until after the November election.

My next question relates to the rural factor. Are graduates sufficiently prepared to practice in rural areas after 24 months of a typical PA program? The answer I found in a talking with a couple of programs who place PAs and NPs in rural areas is that PAs are very green. I'm not necessarily advocating another clinical year or residency program, but it is something to consider.

Next, the physician oversupply needs to be addressed. We talked about this earlier. We see that as the physician oversupply worsens, the wage gap between MDs and PAs and NPs lessens. I know that the advanced practice nurses are already addressing this issue. They feel that young MDs are going to come in and take NP jobs at NP salaries. And they are already positioning themselves to say that as nurses, they bring a certain distinct set of skills to the table that complement the MD skill set. I think that the PA community will focus on this as well.

Finally, my last question. I really don't think that there is a PA discussion without a NP discussion. The two have to be talked about together. As my final point, What kind of relationship is the PA community going to have with NPs? Is it going to be one of cooperation or competition? What are the opportunities for collaboration between the two professions? What can both of them bring to the table to add value to the health professions?

Finally, I should mention that Pew is assembling a task force to take a look at the impact of managed care on physician assistant education, practice and regulation. To do this, we are convening a task force with national policy makers, academics, and representatives from care delivery organizations. We will issue some recommendations and also produce five to seven case studies of innovations that are going on in the system.

7 - Education for a Changing Health Care System

Christopher Bork, Ph.D.

Educating For A Changing Health Care System

"First, we need to speak to each other; we need lateral communication within and among the scientific disciplines...Second, science itself is nondisciplinary. Man devised the disciplines for the sake of convenience, but such a decision is an artifice contrary to the way nature behaves..."

Leo Schubert, Professor of Chemistry, The American University

The same may be said for health care, hence an adaptation of Schubert's quotation: First, we need to speak to each other; next we need to understand each other; ultimately we need to trust each other. We need lateral communication within and among the health care disciplines. The state of health itself is nondisciplinary. We devised the disciplines for the sake of convenience, but such a decision is an artifice contrary to the way nature behaves... the being is either healthy or not.

Innovative models of health care delivery, many of which include the physician assistant in a gatekeeper role, have profound implications for the education of physician assistants as well as other allied health professionals. For a team approach to primary care to be successful, the physician assistant, the physical therapist, the occupational therapist and the nutritionist and other health care providers must have an in-depth understanding of the capabilities of other professions and disciplines. They are also must have a professional trust and respect which will serve as the basis for referral. The focal point of all health care professions will have to be the consumer of health care, rather than the profession itself. This will necessitate a change in the professional socialization of students as well.

Interdisciplinary team building

The challenge to educational institutions including schools of allied health, nursing and medicine will be to devise learning situations and learning strategies that provide the greatest opportunities for the students to collaborate in learning and to teach each other about their professions. Multidisciplinary or interdisciplinary course work in a professional curriculum must acknowledge the fact that students are seeking to first develop a professional identity. Nonetheless, early foundational course work, which is foundational for more than a single discipline, provides a means to introduce students to shared course work. It may also be economically prudent to provide a basic course which a number of professions require as one large class, for example anatomy. As students become more cognizant of their professional roles, other multidisciplinary courses may also be useful. In my opinion, shared course work should occur which closely simulates professional practice and requires students to cooperate in order to address the client's needs. One example might be a course in history-taking and physical diagnosis that will be shared by physician assistant students, occupational therapy students and physical therapy students. In this course, the physician assistant students may add to the other students' skills in those areas that encompass internal medicine. In another clinically oriented interdisciplinary course or module, the occupational therapy students will provide insights into sensory integration and into cognitive functioning. For skill development in musculoskeletal evaluation, the physical therapy students may provide help and insights for their colleagues in the other professions. The expectation is, that in addition to learning the "clinical" content, the students will also develop friendships and respect by learning about their peers. Subsequent reinforcement of the classroom learning could be through clinical learning and actual practical

examinations involving multi-disciplinary activities. Perhaps one simulation might even be a primary care center. Years ago, the University of Kentucky required students to engage in clinical education experiences on a team. It may be timely to revisit the team strategy for clinical education. A challenge to educators will be the identification of clinical role models who function as interdisciplinary team members. In my opinion, there is a need to enhance students' and practicing professionals' knowledge and trust of other members in the health care professions, especially in the allied health professions. The extant research, though modest, supports shared learning experiences in the classroom as well as in clinical situations which enable students to develop an understanding, appreciation and respect for other members of the health care team.

I offer an idea and a challenge. Doctor C. Everett Koop, the former Surgeon General, described a program wherein the medical students adopt a family in the community for their years in the medical school curriculum. The program allows students to experience real health care needs as they learn to become physicians and provide a service to the community. I propose the health professions, including the physician assistant, form interdisciplinary teams to adopt families in rural and urban medically under-served areas. The team that could conceivably involve physician assistants, physical therapists, nutritionists and other members of the care team. This initiative would provide students and faculty hands-on experience on an interdisciplinary team while providing care to the community.

Advanced information technology

Although I anticipate other individuals will also address technology, I feel compelled to predict that physician assistants increasingly will be expected to use information technology. In the immediate future, the notebook and/or hand held computer with or without wireless link will become as characteristic of practice as the stethoscope. Patient/client information, critical pathways, protocols, the latest literature, and even physician specialists can be accessed almost anywhere enabling the physician assistant virtually unlimited geographic flexibility in seeing and treating clients. The physician assistant may in fact assume a responsibility for introducing the advantages of advanced technology to her or his physician group. Students will receive assignments, schedules, even multimedia case studies which will be digitally stored. They will be able to focus upon understanding and extending their comprehension rather than passively transferring the instructor's notes to their personal notebooks. Communication with instructors, authorities external to their campus, and the latest research via internet, Internet and world wide web will allow and support continuous, self-directed independent learning which is an expectation of a professional. For those practicing in medically underserved or remote areas, the technology will provide access to colleagues and educational opportunities which will serve to reduce professional isolation and potentially affect the maldistribution of services.

I anticipate students will be required to own their computers. Technology is already available which will allow students to access the latest information anytime, any place.

Although I am an avid proponent of technology, some caution must be observed. I envision technology as assistive to and not a replacement for the human interaction, which is essential and fundamental to health care and education. Technology must be used to handle tasks which take the practitioner away from direct patient/client interaction and to emancipate the practitioner, thus allowing more time with the patient. Prudent use of new technology must also be used to enable the faculty to socialize or acculturate students into the profession. Simply stated, technology can be used to deliver information and consequently free faculty to focus on teaching students (as role models) what it means to be a physician assistant.

Research on outcomes

Physician assistants increasingly will be required to evaluate their professional practice and to work to improve quality, cost effectiveness and clinical outcomes. They will need to become competent producers, as well as consumers, of research. One of the best ways to learn research methods is by immersion in a research effort. Thus students may become required to conduct modest research as a component of academic preparation. The implications for education are profound, for there will be a need for faculty who are competent and experienced researchers to serve as mentors. The ability to perform research and contribute to knowledge is typical of graduate level education.

In the future, I would envision the physician assistant to be prepared at the graduate level because the physician assistant will increasingly be required to problem-solve and to perform critical analysis of data. I envision these expectations as graduate level competencies for they are not typical of an undergraduate curriculum.

Public education

I think we will see a drastic change in the way the physician assistant contributes to the health care as a result of the changing health care environment. We are already witnessing the emergence of large health organizations similar to the agri-business in food production. There is and will continue to be an emphasis on cost effectiveness and cost reduction, if possible through elimination of duplication of services, economies of scale and optimally using the appropriate professional to perform procedures. Optimally, the professional performing procedures will be the one who is the least expensive yet most qualified to provide high quality care which the public deserves. The public will need to be educated to accept the idea that health care performed by non-physician professionals is not second class care.

An increase in patient responsibility and concomitantly, a greater emphasis on educating the patient for self care will be necessary, along with an emphasis on wellness--a change from crisis oriented health care to prevention, responsibility, and healthy life styles. There will also be a need to educate the public to accept new models of health care delivery and to more fully participate in their health care. Thus, the best ways to involve individuals in their own treatment and to have them continue in their own, self-treatment must be identified and validated. Education for wellness and prevention should begin early, in the schools and continued through multiple media. Those in the health care professions must also develop a coordinated and comprehensive re-education of the public to maintain function, maintain health, promote wellness and prevent disability. This will be essential for the physician assistant as a primary care provider.

When challenges are viewed as opportunities, the capability for positive outcomes is greatly enhanced. The health professions are being offered many opportunities these days; I pray our ability to achieve positive outcomes is commensurate. I wish to thank you for the opportunity to express these views and congratulate you for being open to opinions from individuals outside your profession as you shift your educational paradigm.

Some Parting Thoughts

That was my prepared talk and now I would like to digress a little bit and give you some observations and reactions to what I have heard at this meeting. I don't have answers, by the way. These are only questions. The first is to challenge some of the comparisons that are made between the United States' health care system and those of other industrialized nations,

specifically, on health indices comparing mortality and other indicators of health. Is there something that we are missing because all these other modern countries that we are being compared to have single payer systems with universal coverage?

Regarding managed care, I wonder if there will be a response to managed care as the "baby boomers" are denied treatment as they age and become more susceptible to chronic disease? Recall this is a substantial segment of the population with considerable economic and political power. Will the aging "baby boomers" represent another market for physician assistants, or stated differently, is your market growing as these people age? Is there a role for physician assistants in the care of the elderly and chronic disease? I think so, but you will have to answer that.

I am a physical therapist by training. I close my eyes sometimes, and it is as Yogi Berra said: "Deja vu all over again." There are some parallels in the growth of your profession and mine. Both professions and others within allied health share concerns about the proliferation of programs, concerns about work force demands and oversupply.

Speaking at a Association of Academic Health Centers Congress, a physician and medical sociologist from Harvard, made some very, very good points about the impact of social, ethnic and cultural components of disease. The speaker suggested it takes ten minutes for a physician to adequately interview a patient and to become cognizant of the social and other factors which may affect the patient. He also lamented that with managed care, physicians are allotted less than ten minutes to see the patient. What implications do his observations have for the physician assistant profession? Will you be that person who will provide the "high touch" along with the "high tech?"

I have some concerns about the manner in which managed care appears to be evolving. In previous proposals for health care reform there was an unstated assumption that the savings realized by eliminating unnecessary duplication and fragmentation of services would be reinvested back into the system to provide a safety net, to expand access and to improve the health of the populace. Thus far, I don't think we've seen that with managed care. I think what we have seen is a shifting of the profits from physicians and hospitals to corporate enterprises. Despite commendable vision statements and goals of quality, I think we need to recognize that the corporate ethos is to maximize profits. The potential rationing of care and service to maximize profits represents an ethical dilemma for educators. We must prepare our graduates to function in an environment which is increasingly cost conscious and, in many cases, profit oriented. Yet, we must continue to instill and support the ethos of providing quality care to those who need it, for health care is about helping people!

Others have alluded to the need to differentiate the role of the physician assistant and the nurse practitioner. In my opinion one of the key differences, which seems to be critical, is whether the practitioner is independent in practice or interdependent in practice[1]. Stated differently, is the professional a physician extender or a competitor? From where I am standing, I think economic issues will be key determinants in the future of the mid-level practitioner.

Finally, I would like to recognize the Wayne State Health Care System for a term that I just heard three weeks ago and I think the Pew Commission and others should borrow. Rather than referring to certain workers as multi-skilled, they refer to them as multi-talented individuals. A very positive spin on a very controversial topic.

Lastly, I think there is ample need to develop quality indicators that are non-economic in nature. We need to help managed care and help the health care industry develop those indicators.

[1] I wish to note that I initially used the term dependent to describe the physician practitioner and was informed that their practice is interdependent. The word interdependent is used because it appropriately describes the role of the PA.

8 - PA Employer View

Brian Trojniak, PA-C

I have been vigorously taking notes and trying to transform my presentation based on the questions that everyone asked. There are a couple of things that I want to tell you about myself, but before I do that, I want to thank everyone for inviting me here. This is a great opportunity and I think a huge step in the right direction for PA education.

I have been interested in getting involved with curriculum development for a number of years from the perspective of an employer of PAs, so this is very exciting to me. When I was asked to do this, I was asked not to review any literature, not to read anything, and to shoot from the hip. So I intend on doing that, but I also have to admit that I did do some reading. I read Jim's excellent report in the APAP newsletter on the PA work force. I could not avoid reading it. That is sort of a passion of mine --work force issues.

I wanted to lay a foundation for you so that you could understand where I am coming from in regard to what I think are critical changes in PA curriculum that need to occur. I am a PA and have been one for 11 years. I am always proud to say that I am a graduate of the University of Iowa PA program where I received excellent training. Although it was primarily a rural-based program, it did satisfy a lot of my needs and was helpful for me in my role in urban communities.

I have also been in an administrative capacity for about four years; that is where my experience has been in hiring PAs and developing models of care that involve utilization of PAs. One of those models is being funded by the Pew Commission in its community-oriented primary care initiative, which really somewhat mirrors the community-oriented primary care models of the early 80s, but expands that a little bit beyond involving underserved areas, and looks at less well-defined populations.

More recently, I have been involved in PA education in a partnership with Wayne State University in their new PA program. I think we have developed an exciting partnership with that program, which includes my involvement in clinical site development and also teaching in the classroom, so it has been very interesting to me. I really have enjoyed interacting with the educators. This is sort of a new venue for me and I have met a lot of extraordinary people in the last year or so.

So let me begin. I wanted to try to provide a common definition of managed care so that we are all talking out of the same mouth. Some of this is a compilation from various experts in health care planning. Most of it is from Pew. I am going to read this to you and if you want to give me a response you can:

"Managed care refers to the assumption of the responsibility and accountability for the health of defined populations and at the same time accepts the financial risk inherent in assuming that responsibility."

Managed care really has been evolving. Initially it was a financing mechanism for health care. More recently, it has concentrated on reducing costs of providing care and finding the best way to utilize scarce resources. I think the ultimate expression of managed care is starting to evolve; that is, managing populations and doing that efficiently. I want to stress population management because I think the future of PAs is really dependent on an understanding of that and the skills and competencies required to be effective as a PA in managed care. I am also delivering this under the assumption that managed care is going to continue its swift expansion and transition of the health care delivery system across the country. There has been estimates

that by the year 2000, up to 60% of the population will be participating in some kind of managed care organization.

Jennifer talked a lot about integrated delivery systems; and, as far as structures go, it looks to be the trend of health care organizations. Becoming much more integrated, providing not only primary care and hospital care, but also rehabilitation services, hospice care, home health care and so on. System integration has important implications for the roles of PAs.

I wanted to review a couple of core concepts of managed care and again. reiterate that managed care is not a structure, but really a way of taking care of patients and taking care of a population; it is a verb not a noun, so to speak. Managed care is: 1) Primary care-focused. 2)All participants are held accountable, not only for the health of individuals, but for the health of the population they are serving. 3) Information management is essential for continually improving the quality of care that is provided. 4) There's always a clear link between the financing of health care and delivery of health care. 5) Managed care is primarily about interdisciplinary teams and a team approach to this another area, or just too broad to call one area?

I think there are some clear responses that need to occur in this transition towards managed care and it relates specifically to PA education. I think there is a need, and many of you have heard this too many times, for a paradigm shift. I think it is important for educators in PA education to view managed care as an opportunity, not a threat. They have to become proactive in preparing PAs for this rapid change in health care delivery. To lead the way. I'll tell you what: managed care is not always certain about how to best utilize PAs.

I see that as an opportunity.

There are knowledge and skills and what you might consider values that are going to be critical for functioning effectively in managed care: 1) PAs need to have a clear understanding of what population management really is. 2) They have to have a thorough understanding of concepts, methods, epidemiology and public health. 3) They have to be able to accept the dual role of providing quality patient care to an individual patient as well as improving the outcomes of the population they are serving. I think I am reiterating the point I made before.

4) There clearly has to be an ongoing emphasis on primary care. That is something that has been the foundation of this profession from the beginning, and I don't think that point needs to be reiterated. I think everyone feels pretty strongly about that. What does this mean? For PA educators, it means aligning with primary care delivery systems, and training PAs in communities. It means creating educational opportunities that mirror the way health care is provided: not fragmented, not episodic, but longitudinal. For example, we often send PA students out to hospitals for the afternoon to practice the history and physical exam. They will see a patient and then go home to do the write-up.

Consider a different model where the PA student in their first week or first month of the didactic year, goes out to a clinic, spends some time with a PA or a physician, and begins practicing those patient evaluation skills. They continue weekly visits through the course of the first year and develop their own panel of patients that they continue to see in the clinical year. They now have a mentor, and a panel of patients who are experiencing not only acute care problems, but issues related to health promotion/disease prevention, home health care, long term care, hospice care and so forth. Imagine the PA student following their patient into the emergency room. Or doing a home visit. That is what health care is about. It is not about seeing a patient in the ER and saying good bye as they walk out the door and never seeing them again. I think we need to think a little bit more about how we can better mirror health care in their educational experiences.

I am getting a little into recommendations and strategies and I apologize.

5) Managing information. All of the presenters have talked a little bit about that. It is not just being able to utilize information systems or to collect data. It is how to use that data. How to apply statistics in a way that you can continuously improve the processes of delivering care. PAs need to understand that, in order to understand the concepts and principles of continuous improvement in health care.

6) Health care financing. This is one of my pet peeves, when it comes to hiring health care workers. There is often a lack of understanding of the need to be accountable for containing health care costs. Whether it's a decision about ordering a CBC or whether a patient should have bypass surgery, PAs don't necessarily need to be able to make some of these decisions on their own, but they need to understand the implications of those decisions. We need to teach that in education programs.

7) Emphasis on teams. PAs already work in teams with physicians, but they need to work more in teams with other health care providers: social workers, psychologists, home health care nurses and so on.

Now I would like to give a couple of recommendations, probably more than a couple, and suggest some strategies for PA education. 1) Again, it is critical that PA education align itself with the health care delivery system. I tend to think that is managed care, and a lot of other people do too.

2) Train students in communities. And I am being a little bit redundant, purposefully. 3) Create a longitudinal learning experiences for students. 4) Strengthen partnerships with managed care organizations. We need to pool our resources, whether it is for curriculum development, for developing training opportunities, for mentoring students, or for providing financial assistance for students. For example, if you have aligned yourself with the delivery system and you have a clinical training site in a community that is underserved, there should be an assertive group effort to find interested applicants for PA programs that we can mentor and help get through programs because they may go back and serve those populations in those communities. 5) Think about how we can develop student teaching opportunities that add value to the patient care. Think about how the student involved in patient care can improve the health care of that individual patient, and document it. 6) Emphasize core skills: team skills, informatics, communication skills. PAs need to know how to talk to people --whether it is patients, physicians, colleagues, or other health care workers. PAs need to know how to talk to people.

What makes a good PA, and what helps a PA get through PA school? It has been my observation, and this is purely anecdotal, that those students who have the best communication skills excel in the clinical year. I don't know if they excel as PAs. My guess is they do.

7) Emphasize continuous improvement as a core competency, core skill.

8) One area that PAs excel in and are outstanding in and need to continue to be outstanding in is in data collection, history and physical exam skills. PAs don't always have to make the diagnosis, but they have to be clear and concise about their physical findings and the history that they have taken. If they aren't, the supervising physician and consultants will lose trust in the PA. PAs have to be "experts" in history and physical exam skills. I think most PAs are. I mention that because as curriculum changes, I would hate to see emphasis taken away from patient evaluation skills.

9) PA students will benefit if they are put in situations where they are challenged to be efficient in providing care, and recognize the need to be efficient in providing care. It is nice for a student to have an hour to spend with the patient; however, that is not the real world anymore. We need to challenge them to be more efficient towards the end of that clinical year so when

they graduate they are prepared to provide high quality, cost effective care. 10) Pursue opportunities for new interdisciplinary experiences. If we work together, I think we should learn together. And finally, I guess my final recommendation is more directed towards the leadership.

I think it is critical, although I think it will be very difficult, for the AAPA and APAP to come together and try to come up with a common vision for the profession. Conflicts of interest may arise, but without that common vision, it will be difficult to map out a strategy for the profession that will meet the needs of our ultimate customers -- the patients. That is where I will end.

9 - Physician's View

Norman Kahn, MD

I want to tell you a little bit about me before I tell you what I am going to say here today, because I assume that I was invited here today in my current role, which is Director of the Division of Education on the Staff of the American Academy of Family Physicians. However, that is a position that I've only held for the last four years. Like Brian, a little bit, I was mistrained although in the reverse. I went to an urban-oriented Family Practice residency program and then promptly went into rural practice for which I don't think I was quite as well trained (as if it had been the reverse).

However, in my training, I had a lot of experience with nurse practitioners and nurse midwives, but not with physician assistants. When I went into practice, I inherited a practice in which there was a physician assistant, and for those nine years worked with a physician assistant. During that period of time, I became a residency director and was a medical director of a PA training satellite affiliated with UC Davis, and then joined the faculty at UC Davis where I was liaison faculty in their PA/Family Nurse Practitioner training program.

So I have a bit of a unique background. I was talking at lunch about the fact that there are not a lot of places in the country where nurse practitioners and physician assistants are trained together. I spent most of my professional career in an environment in which they are trained together and in which the practice opportunities are really very similar, with some limited exceptions. At the University of California Davis Medical Center, although we trained both, the medical center would only hire nurse practitioners.

Right now the American Academy of Family Physicians, a lot through Steve Crane's efforts, has enjoyed a growing relationship with PAs. I think we have been reasonably close as professions; family physicians and PAs work together in the field really quite often. We have much less dialogue with the nurse practitioner community. Our members work with the same number of nurse practitioners as they do with physician assistants.

Some of the remarks that I am going to make are going to be similar to others and some of them will be slightly different, but not too awfully different. I am going to talk a little bit about the changing health care system, a little bit about academic health centers, a little bit about the quantity of the work force, and then a little bit about competency. I am also going to use that term, managed care. I think it is pretty clear that we are all preparing for careers in managed care. Not all of us; but it certainly is growing in its penetration in the United States. Even in some areas where they have been immune for awhile, they are no longer immune.

Clearly, in a managed care system there is a need for primary care providers with some exceptions, and there are exceptions for family physicians as well. You may not realize that the Group Health Cooperative of Puget Sound, one of the oldest and most well-established HMOs in the country laid off a half a dozen family physicians last year. It has to do not with the role of the family physician, as I don't think laying off PAs in HMOs has to do so much with the role of the PA. In this case, it has to do with the market for covered lives. There is just more competition in the market for covered lives. But overall, there is a tremendous demand for family physicians, and for other primary care providers; clearly at least half of the physician assistants fit that definition.

There is a need for cost-effective providers and again, I think, both of our professions fit that bill, and, a growing importance of team relationships. We refer to such practices as integrated practices. There is a lot of rhetoric in the language. You won't hear us use the term

dependent nor the term independent. We use the term integrated practices, and I am going to get more into that when I talk about training.

The delivery system continues to evolve with inadequate service to vulnerable populations. Let's not forget the fact that there are more health profession shortage areas now than there were ten years ago. Unfortunately, health reform or not, we have not yet done a very good job of meeting the need of vulnerable populations. Primary care is clearly what is primarily needed to serve those populations, urban or rural.

The next point is enfranchisement of the full population. Other speakers have mentioned that as well. We are still the only western developed nation that does not enfranchise its full population. South Africa was the second to the last, interestingly, but their new constitution has health for all.

You are going to hear me refer to the two professions in the same sentence often. Not simply because we have an improving political relationship, but I think because of the ability of both professions to meet the needs of this market.

There are too many subspecialists. We were talking at lunch about the fact that there are too many physicians. Weren't we worried, we in medicine, that we were training too many? I am going to talk about quantity in the work force in a moment. We have clearly too many subspecialists for the cost implications and for a whole lot of other social costs. This country has not experienced before what we are experiencing right now--physicians out of work--but other countries have, and we are going to have that opportunity to experience that as part of our culture.

That, of course, brings up some of the issues about the roles that physician assistants can play and have played now for quite some time in academic health centers. The issues of physician supervision under HCFA's new rules for teaching physicians will have some impact on that as was brought up earlier. To some extent, it depends a little bit on the Medicare population and whether a state pays the same for Medicaid as is does for Medicare. In public hospitals where the Medicare population is reasonably low, and in a state in which Medicaid and Medicare are separate, I would not be surprised if some of the academic institutions simply choose to forego some Medicare billings, which may be the easiest way around the new rules. On the other hand, in Illinois and some other states, in which Medicaid and Medicare are paid by the same carrier, public hospitals cannot afford to deal without Medicaid billings, therefore that will be an issue in those institutions. It will be a challenge for the PA profession to decide, as it has been for the medical profession, are we primary caregivers? Subspecialty? Is there room for both? How are we going to meet the needs of two diverse markets? I think there is really opportunity there as well as challenge for the PA profession.

Specifically, as it relates to other primary care providers, particularly primary care physicians and family physicians, I do want to share with you a perspective we feel very strongly that family practice residents, that is trainees in family practice, should be educated in integrated teams with physician assistants and for that matter, nurse practitioners in which the physician assistant serves in the faculty role.

The physician assistant student is at a different level of development than the family practice resident. In the training of family physicians, we like to see the physician assistant in an integrated role model type of practice in which the family practice resident is learning that integrated relationship from the physician assistant serving in a faculty role and as a provider.

With regard to the quantity of the work force, I can give you some official language, which I will leave with you--a copy of our work force reform plan. There are dozens of work force reform plans out there, but this one is interesting because it calls for a 50% increase in primary

care physician assistants. Dave Kindig, MD, who is the chairman of Council on Graduate Medical Education (COGME), helped us before he became chair of COGME in putting together the data that formed the basis of this report. He worked on this in 1994, which means he was using 1991, and 1992 data. So by 1996-97, you are already producing 50% more than you were in 1991 and 1992.

It also calls for an increase in the production of family physicians, but not fifty percent. We are producing about 2900 family physicians a year right now and we feel we have to produce about 3800 a year. Now, some of you will think that is a lot, and some of you will think that is not very many. And that is kind of the way we feel. There is a lot of concern that we should not overshoot the mark. On the other hand, there is a lot of concern that we need to be meeting the needs of all the population, including the unenfranchised. Similarly, there is that surplus of subspecialists out there, what are they going to be doing? Well, there are a lot of things that they can do, including practicing their own subspecialty, continuing on and doing research in their subspecialty, teaching in their subspecialty, and further subspecialization, not unreasonable in the American economy. One option for a cardiologist is to become an electrophysiologist. If you get yourself a smaller niche, we don't need as many of you, but we probably do need some electrophysiologists.

One of the things that is very troublesome and very challenging is something a cardiology group was faced with in Orange County. There were 36 in the group and the HMO said to them that only 12 were needed. But the HMO could use 12 of them as general internists. Now that is a little bit of a dilemma because you have to ask yourself whether a cardiologist who has been trained and is practicing as a cardiologist is ready to become a general internist with or without re-training.

Family practice was at a steady state from 1980 until 1990, but since 1990 we have been growing rapidly. We have 10,102 residents in training this year. Last year we had 9,410. The year before we had 8,513 and the year before 7,823. That is the kind of growth that family medicine is experiencing. In spite of that, we will not meet our projections. We will not overshoot the mark. We will not even have enough. As a matter of fact, this is the most conservative estimate that we have ever come out with in our 49 year history. This is one family physician for every 3,000 Americans. We used to say one per 2,500 or 2,750.

In managed care, depending on the prevalence of geriatric population, family physicians see 2,000 to 2,400 patients or if they have a high geriatric population, 1300 to 1500 patients. Yet we are calling for one family physician for every 3,000. Why? Because we expect in this country to have an interdisciplinary definition of primary care: general internists, general pediatricians, PA's and NP's. We will talk about ob/gyn (they have changed their training requirements, maybe it will work), another time.

We appreciate the opportunity to help the PA profession with the program assistance in technical help (PATH) program, which the family practice residency assistance program (RAP) was invited to provide some assistance and training. We did feel very good about that relationship, and wish you the best with that. You are facing the same kind of growth challenge that we are in family medicine. We now have 451 accredited programs. We had 380 in 1990; 380 in 1980. So there is very recent and rapid growth.

We expect to level out somewhere around 480 in about 2 or 3 years. We have some evidence that that might actually happen because we can predict three or four years in advance by the number of requests for applications for accreditation of programs, which are down about half of what they were over the past five years.

My final remarks will be about competencies. I brought with me, although this is not a complete set, a set of core educational guidelines which we produce for family practice residents. I am going to leave them with you. They may very well be the kinds of competencies and curricular guidelines that you may also be interested in. I would be interested in your feedback whether these appear appropriate for physician assistants. I brought these because I think they help answer your question to me, which is, "What are the competencies that physician assistants are going to need in the future?"

One of our most recently published core educational guidelines is on care management which prepares you and us for practice in a managed care environment. There is one on medical informatics and computer applications. There are two on preventive medicine; one on health promotion, and one on disease prevention. That clearly is an increasing part and always has been a part of our practice, but clearly is more of an emphasis in the evolving delivery system.

In practice management--not everyone will be hired in a managed care setting. There are still people who are going to go into rural practice where managed care has not penetrated and other delivery systems--community health centers. There is a guideline on risk management and medical liability. To some extent, primary care has been more immune on a relative scale from medical liability than some of the subspecialties, but it is an extremely litigious society and we are no longer immune. I was speaking at a state academy meeting; I won't mention which state. I asked them to raise their hands if they had ever been sued, more than half of them raised their hands. I won't ask you!

Human behavior and mental health. Here is a competency that has always been a strength of family medicine. If you went to a family practice residency at this point, you would find that virtually all of them have video equipment and use it. They also use role playing. They have a tremendous emphasis on human behavior and mental health. There are only two kinds of faculty that are required in a family practice residency--family physicians and behavioral scientists. This is a clear element of primary care.

There are also guidelines on nutrition, alcoholism and substance abuse, research and scholarly activity and two special ones: one is called Special Consideration for the Preparation of Family Practice Residents for Rural Practice and one for Urban Inner City Practice.

The most recent one, curriculum guidelines on culturally-sensitive and competent health care, is from the Society of Teachers of Family Medicine.

We feel strongly that the appropriate procedural credentialing of physician assistants is any procedure that the physician with whom they are working in an integrated practice feels comfortable supervising the physician assistant.

There are lots of needs to do procedures. But in managed care, there is an interesting dichotomy. If it is an IPA model, where there are lots and lots of subspecialists, and lots and lots of turf issues, it is very hard to get family physicians privileges to do procedures. But in staff model HMOs, in salaried settings, where there are not as many subspecialists, and there is no financial disincentive for the subspecialist to teach, supervise, and permit a primary care provider to do a procedure, the family physicians are able to do much more of what they are trained, experienced at, and feel comfortable doing. They don't get paid any more to do it either, but there is that opportunity. Likewise, there would be a similar opportunity for the physician assistant to some degree.

The last comment I want to make is that as one of the seven parents of the ARC-PA we have had the opportunity recently to review the new standards and guidelines. Our first review was in February and our Board of Directors communicated in March. Since then the majority of concerns that we had at that time were addressed. We have two minor remaining issues but other

than that, feel that the new standards and guidelines are really quite appropriate, and depending of course, on how they are implemented locally, should prepare physician assistants well.

The only one that I will mention here is that our Board felt that in the previous standards and guidelines, there was a minimum length of time which was not required, but stated. It was a guideline, not a standard. That was deleted from the current standards and guidelines; our recommendation is that you seriously consider putting a minimum length of time back in.

10 - PA Employer View

Kenneth Moritsugu, MD

As a customer, a consumer of the PA profession, I thought I would very quickly walk you through some of the issues that we consider as we look at our needs: How do we determine what our needs are? How do we analyze them? Then, how do we develop strategies in order to achieve what we need to do? Finally, how do we get those necessary resources?

What I will do very quickly is take you on a rapid tour through the Federal Bureau of Prisons and our health care delivery system, because I think many of you are not familiar with it.

We represent a managed care delivery system and if you think about it, it makes sense. We have universal coverage--everybody who belongs is covered. We also have mandatory enrollment and a defined service package. In addition, we have a closed panel of primary care providers. We control access to second opinions. Furthermore, we control our consultants and have an IPA or a PPO. We have the capability to move our patients, our consumers, from site to site depending upon which location provides the best access to the best quality of care at the best cost, and have both internal and external quality improvement/quality assurance programs. Finally, we participate in peer review both in the community, as well as in the courts. We do this all within a global budget. We have a finite budget and on the average, it has been running us about $3,200 per inmate per year. As Jennifer was describing her national data, I did a quick calculation; in the community at large, that comes out to approximately $4,000 per American per year.

In the Department of Justice, one issue, is that as employees, we are faced with rapid population growth and the responsibility to administer quality health care. In the physician assistant profession, we are all the experts--sometimes we push and push to get the answer when what we really need to do is take a step back, look at the environment and realize the answer may be staring us in the face. The message is: always look at the environment. Never forget to look at the environment.

The Federal Prison System is a large nationwide system. I have been medical director for nine years. When I became medical director, there were 48 institutions. There are now 90 institutions and we are opening new ones at the rate of five per year. Nine years ago, there were 42,000 inmates. Now there are 104,000 inmates and the numbers continue to grow.

Let's look at some of the characteristics of our Federal inmate population.

First, the female percentage is increasing. Then, there is the offense profile. Back in 1981, drug-related crimes represented less than 30%. In 1989, it was close to 50%. In 1995 it increased to over 60%. When we look at length of sentence, you can see that people are staying with us longer.

When we examine the racial characteristics of inmates in the Bureau of Prisons, white inmates represent 58%, African Americans represent 39%. The Hispanic ethnic composition is about 26%. This pretty much mirrors national data within correctional systems throughout the country.

When we look at inmate population by age, more than half of our inmates were under age 35 in 1981. In 1991, more than half of our inmates were older than age 36. The population demographic curve is showing that there is in addition, at the lowest end, an emergence of the youthful, violent offender.

What does this tell us about our inmate population--the people whom we serve--our customers? We are a larger system. We have more inmates. There are more females. The offense

profile is moving towards more drug-related crimes. They are staying with us longer and they are growing older.

Now, this is all sociological demographic data, but we are here for health care. This gives us a trend: where it was before and where it is now. We can generally tell where we are headed in the future; that is what we are attempting to do when we plan.

The mission statement in health services is straightforward: Provision of essential health care for inmates with professional staff consistent with acceptable community standards. When we look at vital issues in health care, it is just as everybody else talks about: access, quality and cost issues, but very specifically in that order, because we have arrived at the conclusion that if you start off with cost issues first, access and quality will suffer. By starting off with the provision of appropriate access to quality care, we are able to have an impact on the cost of that health care. Access is defined by both ambulatory primary care services, as well as more specialized care. In each one of our 90 institutions, we provide primary care at clinics with the services I have delineated on this slide. We have, in addition, medical referral centers and specialized institutions. Six are currently on-line, and two more are going to be coming on-line. Five of those medical referral centers went through JCAHO reaccreditation this year: Three of them were accredited with commendation--one with a score of 96 out of 100, and the other with a score of 94 out of 100. If one ever asks what are we doing, we are benchmarking with community standards. We have staffing guidelines for every single one of our 90 institutions.

We also have quality of care programs which very much mimic what is going on in the private sector. Furthermore, we participate in the National Practitioner Data Bank, and we voluntarily participate in external peer review.

Total health care costs are increasing. You remember, I told you that inmate population that is also increasing. So now, let us divide the total cost by year by the total inmate population by year. What we get is the health care cost per inmate per year. You will notice that in 1993, 1994, and 1995, that cost was approximately $3200 to $3300 per inmate per year, a pretty flat graph, despite community-wide inflation and increases. That is because we applied appropriate access to quality care and cost confinement actually followed.

So having shown you where we are, what is the plan? We have two separate but elegant strategies: health promotion/disease prevention, and managed care. Why is that? Because of all the information that we presented earlier--the demographic data--gives us an indication about where are we heading. We know the people are going to be with us longer; therefore, they will get older and for that reason, it is better for us to consider promoting health, and preventing disease, rather than "fixing it after it's broken."

What are we doing as far as health prevention/disease prevention and why?

In the Bureau of Prisons, the causes of death in 1993 pretty much mimicked the leading causes of death in the US. However, when we look at the risk factors leading to those causes of death, we have: 1) for heart disease: tobacco use, obesity, lack of exercise, poor diet, increased blood pressure etc., 2) on cancer: tobacco use, environmental factors, etc., 3) for cerebrovascular disease tobacco use, obesity, lack of exercise, inappropriate diet, etc., 4) on chronic lung disease tobacco use, and so on.

What this really means is that the true leading causes of death are poor eating habits, poor nutrition, obesity, lack of exercise, smoking, as major factors. The one key to each one of these is that they involve personal decisions that everybody makes every single day. It is not an intervention that a physician or a PA has to make; it is a personal decision. In our health promotion/disease prevention initiative we believe that if we can teach our inmates how to make

good decisions, we will have affected them not only while they are with us, but also when they return to society.

What is managed care? Throughout the health care community, there are many different definitions of this concept. We keep it simple: it's the right stuff to provide the right care, at the right location, with the right provider, at the right price, at the right time, and ultimately with the right outcome. I am not going to go into any further detail because I think the definition is self-explanatory.

Finally, with all of this strategy, "how are we doing and how does it affect our population?" As a surrogate measure of effectiveness, looked at the actual mortality in our system versus the expected mortality in the community at large. This analysis was a surprise to me. We looked at the actual deaths that occurred in the Bureau in 1993, according to age groupings, and compared these data in a very rough unsophisticated matched population analysis in terms of what we would expect in the community at large. In every single age grouping, there would be more deaths expected in an equivalent community than in the Bureau of Prisons.

Now of course, we don't have people in the Bureau of Prisons running around on motorcycles without helmets, and we don't have people screeching around the beltway at 85 mph an hour without seat belts. We don't have handgun accidents. But by providing appropriate access to quality care, within a cost containment environment, we are experiencing a lower number of deaths in our population, which is at higher risk, than in the community at large.

What are the take-home messages? (1) You can't get there if you don't know where you are going--you need to have a vision. You need to have a defined goal. (2) Data equals credibility, emotion sells nothing today.

(3) A simple and consistent mission--remember ours is only one sentence. Have a clear strategy. For us it is the two pronged health promotion/disease prevention, managed care. Operate with flexibility and tactics in response to a constant monitoring of the environment. (4) Find and use the force multiplier: break barriers, build bridges. I think we have been talking about that all day. Finding ways to become interdependent rather than dependent or independent. (5) Health promotion/disease prevention plus managed care will result in improved access, high quality, and cost containment.

(6) Finally, even if one had all the dollars and all the facilities that they could wish for, ultimately it is people who are the most important and valuable resource, because if you don't have the right people doing the right things, you are not going to be able to achieve your mission.

Having provided you the context of our employment environment in the Federal Bureau of Prisons, let me shift to focus on the purpose of this roundtable--future characteristics for the profession.

"Leadership is about projecting ourselves and those around us into a future that is better for patients and families, less costly for society, and more humane for us all."

Melissa Fitzpatrick, RN, MSN, the past President of the American Association of Critical Care Nurses expressed that sentiment at its National Teaching Institute in 1995.

If such a specialized group of health care professionals-critical care nurses--is looking at leadership in this context, it is timely, critical, and imperative that the physician assistant profession do likewise.

I know that this is not the first effort on the part of the PA profession to exercise that vision, nor will it be the last. But this examination is occurring during a period of our society that directions and decisions have the potential for either defining the long term success of this profession, or losing the high ground for it.

"Better for patients and families,"

"Less costly for society," and
"More humane for us all."

I think Ms. Fitzpatrick has captured succinctly the mandate for this Conference: Access, Quality, Cost, with the emphasis on PEOPLE...patients and families, society, in a humane fashion.

The physician assistant profession has several unique attributes and advantages, including the potential for only a two year lag time between evolutionary decisions affecting PA education, and the actual production of a fully trained professional. Compare this with the physicians, for whom such changes involve a lag time of four years of medical school, followed by three years of residency.

The educational system feeds and sustains the profession, and the Association of Physician Assistant Programs is inexorably intertwined with the American Academy of Physician Assistants, as an educational-professional service partnership.

The dilemma facing all health professions today is to ascertain not only what is intellectually and academically rigorous and pure, but also to identify these desiderata within the context of societal needs and wants. The emphasis is mine, because increasingly, we are seeing the increasing commercialization of the helping and healing profession--what will the marketplace bear, and what will the marketplace purchase.

Society has for a long time defined its goal for health care as a multiple level oxymoron:

- have the greatest access
- for the largest number of individuals
- to the highest quality of health care.

But in past decades, a fourth mandate has emerged:

- to do this all at the lowest price.

The decision maker in obtaining health care has been shifting, from the consumer, to the provider, to the fiscal intermediary. And always, to some extent, the government is involved, representing the collective desires of society, which is increasingly balancing the horns of this dilemma: guns or butter, care or cost.

The dilemma is the tension between the concepts of idealized health care (the intellectually rigorous professional offerings) and the concepts of what we can afford (the marketplace response to needs and wants).

Decisions regarding health care services and programs has moved from the patient-provider venue, to a corporate board of consumers who consider product and cost issues, to health care administrators, to an agent-provider, not necessarily a health care provider, but a cost-benefit analyzer.

To put it differently, I see current trends resulting in a decreased role of the health professional, and an increased role of the health cost manager. I see an increasing emphasis on cost-benefit, and return on investment approaches to the provision of health services, and less emphasis on consumer wants or professional judgment. There is a growing and unmistakable movement to downplay customer WANTS, and to more tightly define the customer NEEDS, and that definition coming not from the patient, but from the fund manager.

Preparing the profession for the future is to take into account what is right, and also what produces a return on investment, to take into account the professional high ground, with the economic realities of a competitive marketplace.

The physician assistant profession is a victim of its own success.

About ten years ago, Medical Economics published an analysis that more physicians were moving out of solo practices, into larger and larger group practices, into more corporate, salaried

positions. I have not seen an update of this recently, but anecdotally, I can certainly sense that this movement continues.

As we in the Bureau of Prisons continue to hire health care providers to take care of our ever increasing population, it is becoming easier and easier to hire physicians, because more and more (on interview) have become disillusioned with private practice, see the handwriting on the wall, sense the increasing corporatization of American medicine, and want to get into a salaried health care delivery system before the stampede begins.

With the increasing corporatization of physician practices, has come a flattening and gradual shrinking of physician net income, when adjusted for inflation.

And this is where the physician assistant profession has blossomed, with success beyond the wildest dreams of the late 60's, with a skyrocketing salary scale, which continues to spiral upward. We are familiar with the data, which show that for every graduating PA, there are anywhere between three to five vacancies, depending on whom you read, and the average starting salary is in the $55,000 range.

The nursing profession has entered this professional and market stratum, with nurse practitioners and others emerging aggressively as positive players. The profession has been moving from diploma nurses to BSNs to MSNs to PhDs. And physician assistants likewise, are moving from BSs to MSs.

This upward movement of professionals is creating a vacuum at the lower levels of service and care. Nature, society, and the marketplace abhor vacuums, and this upward movement is creating a fertile opportunity of the emergence of new para-professionals at the lower rungs of the health care hierarchy, who are less expensive to the system as services become increasingly stratified.

But there are inherent dangers in this forward evolution of the PA profession. The medical profession (MDs and DOs) looked at the PA profession and other mid level providers in its infancy with resistance and suspicion, that this was a subversive movement to inappropriately displace physicians. Over the last two decades, this relationship has matured to a real collaboration and partnership. Dr. Jim Todd, at the last AAPA Convention in New York, articulated this positive and necessary relationship.

However, with increasing PA salaries, and flattening if not decreasing MD income, this collaboration has the dangerous specter of emerging competition, and a return to the suspicion of the past. Consider the potential evolution, within this scenario, of converting multi-physician practices to a combination of MD-PA practices, with zero sum costs, but significantly increased productivity and income, while providing the full range of services. If the patients and society benefit, this is good. If this approach results in a lower level of service, simply to recover an increased return on investment, this is not good.

If health care is tightly stratified, with physicians other than those in primary care addressing a narrower specialty market niche, versus primary care, there is an opportunity for the PA profession fully consistent with its fundamental primary care philosophy and direction. And this is where the PA profession would be well advised to be mindful and watchful of its increasing specialization.

So, after all this rumination about the current and future state of our health care delivery system: **what do I see as trends in the society, in the environment, and therefore in health care needs**? If needs drive a marketplace, these trends should provide a broad prescription of the educational process.

1. There is, and will continue to be, an unmet need in primary care.
2. The population of the United States continues to grow older.

3. Our population continues to diversify.
4. As people live longer and grow older, the impact of early intervention, of healthy practices, of health promotion and disease prevention, will be increasingly felt, as a long-term return on investment.
5. Principles of managed care will continue to drive the system: to do the right stuff: The right care at the right location, at the right time, with the right provider, at the right price, and ultimately with the right outcome.

As an employer I encourage you to examine the marketplace, and prepare for meeting the marketplace needs.

It is truly a balancing act: taking the professional high ground, while facing marketplace reality.

It is important not to blindly keep producing the same product with the same skills, knowledge, and capabilities, but rather professionals who address and meet the needs of a society in a rapidly evolving environment, economically, professionally, and socially...

What is the market niche for PAs? The ongoing needs are and will continue to be in primary care: the fundamental philosophical basis of the PA profession.

PAs took the arid high ground of primary care a few decades ago, in part to fill the void left by inadequate numbers of physicians entering primary care. If PAs abandon this high ground, then they will be in the middle of the professional and economic battlefield with the physicians (MDs and DOs)...not by the PAs choice, but by the choice of the health care administrator who will stratify services, narrow practices, and hire PAs as a marginal improvement in the return on investment, while still being able to provide the specialty services.

My sense is that the physician assistant profession needs to focus on doing what it does well: **to provide access to quality primary care in a cost-effective manner**. And as we examine future characteristics of physician assistant education, my prescription would include the following:

1. Prepare for clinical practice in primary care: keep the high ground. Many professions say they want it; but who actually occupies it?
2. Prepare for a graying population, and the unique issues and aspects of health care of that graying population: whether it is medical, sexual, social, emotional, etc.
3. Prepare for the special population groups and their special health care needs: the underserved, the rural, the urban underserved, the minorities, the new immigrants, etc.
4. Prepare to practice health promotion and disease prevention, at every opportunity. Historically, fiscal intermediaries would not fund health promotion programs. But increasingly, they are beginning to cover more services. this is an indication that even examining an economic return on investment, HP/DP is effective. There needs to be a universal utilization of the golden moment, the few minutes of provider-patient contact when the HP/DP message gets communicated at every opportunity. (e.g. McGinnis/Foege)
5. Prepare to utilize emerging technology, such as telemedicine.

But now that I have provided you my own personal prescription for the profession, based upon my assessment of the environment, let me speak to the other side of the coin, the potential dangers facing the profession.

1. The PA profession may move more to specialty practice. This will muddle your unique role, your philosophical basis, and your market niche that PAs have, together

with other primary care physician providers-the family physicians, the general internists, the pediatricians, the ob-gyns.

2. PA salaries will continue to increase. This is both good news and bad. It will push the PA market up and out of the reach of some employers, and force employers to consider other options.
   In the BOP, eight years ago, we had 150 positions for mid-level practitioners, and committed to filling them with PAs. Today, we have nearly 700 positions, and are pursuing a major restructuring because we cannot find sufficient numbers of PAs to fill these jobs because of competition in recruitment and salaries. This restructuring involves modifying our hiring targets to include PA, NP, RN, EMTs, and potentially other professionals and para professionals.
3. There may be increasing competition with other professional categories: the MD/DOs and the NP and the RN.
4. The environment may encourage the emergence of other professions and expansion of existing roles, which would encroach on the practice domain of the primary care PA, just as the PA profession rose of a need, and an opportunity.
5. Without constantly surveying the environment, it is possible that the profession will be preparing of the right thing in the wrong environment. What was right two decades ago for the environment two decades ago, may not be right in the environment of today or of tomorrow.

This is the challenge--it is truly the Chinese symbol of crisis: danger and opportunity under one roof. I believe you are taking the right approach in examining this now, rather than waiting for the health care juggernaut to roll on and over. It is critical to go far enough, and to realize that every solution is permanent, until the conditions of the problem change. Your efforts here must not be a one time or intermittent effort, but a continuous examination and evolution.

Take the high ground. Retain the professional and intellectual integrity, but appreciate the environment and marketplace forces. And never, never, never forget the ultimate purpose of the profession: It's not the economy, it <u>is</u> to serve society, to serve the patient, to serve the individual. And like the genie in the lamp: Be careful what you wish for. You might get it.

APPENDIX A: Advisory Committee

David Asprey, MA, PA-C
University of Iowa

Steve Crane, Ph.D, MPH
Executive Vice President, AAPA

Catherine Judd, PA-C, MS
University of Texas Southwest Medical Center

Dawn Morton-Rias, PA-C
SUNY Brooklyn

Walter Stein, MHCA, RPA-C
Idaho State University

Project Leader
Anthony A. Miller, M.Ed., PA-C
Medical College of Ohio

Project Officer
Edwin S. Spirer, MSW, MPH
U.S. Dept. of Health and Human Services

Manuscript prepared by:
Deborah Frye

APPENDIX B: Panelists

Christopher E. Bork, Ph.D.
Dean, School of Allied Health
Medical School of Ohio
Toledo, OH

James Cawley, PA-C, MPH
Associate Professor, Physician Assistant Program
George Washington University
Washington D.C.

Eugene Jones, Ph.D., PA-C
Associate Professor & Program Director, Physician Assistant Program
University of Texas Southwest Medical Center
Dallas, TX

Brenda Jasper, M.Ed., PA-C
Chairperson and Associate Professor, Physician Assistant Program
College of Allied Health Science
Howard University
Washington D.C.

Norman B. Kahn, Jr., MD
Director, Division of Education
American Academy of Family Physicians
Kansas City, MO

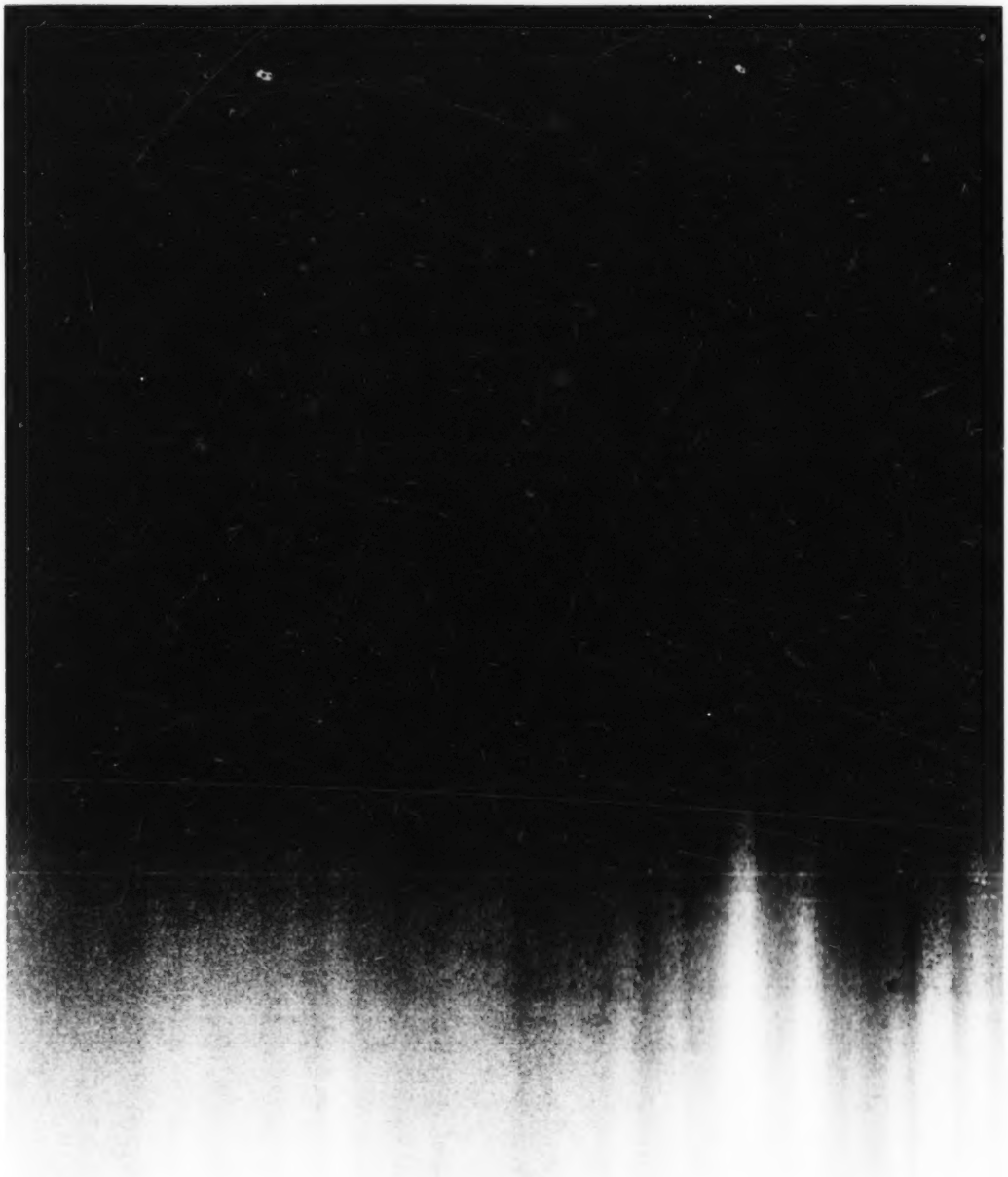
Jennifer Krueger, PA-C
Physician Assistant,
Missoula, MT

Kenneth Moritsugu, MD
Assistant Surgeon General
United States Public Health Services
Washington D.C.

Jennifer Ruzek
Research Associate, University of California at San Francisco
Center for the Health Professions
Pew Health Profession Commission
San Francisco, California

Bert Simon, M.Ed., PA-C
Director Physician Assistant Program
Saint Francis College
Loretto, PA

Brian Trojniak, PA-C
Manager, Allied Health
Clinical Coordinate, Wayne State PA Program
Henry Ford Medical Center
Detroit, MI



Association of Physician Assistant Programs

950 North Washington Street • Alexandria, VA 22314-1552

703/548-5538 Fax 703/684-1924

BEST COPY AVAILABLE